

TWR-17542 Vol. IX

FLIGHT SET 360L003 INSTRUMENTATION FINAL TEST REPORT

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Prepared for:

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Aerospace Group

Space Operations

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FLIGHT SET 360L003 INSTRUMENTATION FINAL TEST REPORT

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1.0 INTRODUCTION

This report summarizes post-flight instrumentation hardware and data evaluations for 360L003.

The 360L003 motors were equipped with Developmental Flight Instrumentation (DFI), Operational Flight Instrumentation (OFI), and Ground Environment Instrumentation (GEI). The DFI was designed to measure strain, temperature, pressure, and vibration at various locations on the motor during flight. The DFI is used to validate engineering models in a flight environment. The OFI consists of six Operational Pressure Transducers (OPTs) which monitor chamber pressure during flight. These pressure transducers are used in the SRB separation cue. GEI measures the motor case, igniter flange, and nozzle temperatures prior to launch.

2.0 APPLICABLE DOCUMENTS

The latest revision of the following documents are applicable to the extent specified herein.

TWR-15968 Interim Summary/Status Pressure Transducer Investigation

Investigation

ICD 3-44005 SRB to SRM Electrical and Instrumentation Subsystems

3.0 SUMMARY

3.1 Hardware Inspection Summary

Overall, the post flight condition of the instrumentation was excellent. There was substantially less damage on this flight set than there has been on the past two flights. There were a total of 21 aft edge hits caused by re-entry debris. This compares to well over 100 aft edge hits on past flights. Cork was also missing just forward of the kick-ring joint. This cork is normally blown away due to air and water trapped inside the aft skirt at splash down. However, greater amounts of soot were deposited on broken edges of the cork than was apparent in the past. The MTI and MSFC Teams concluded that this was due to greater amounts of soot and burning foam in the aft skirt caused by separation of the exit cone at apogee. The Ice and Debris Team did not agree and a PR was written. Cork samples were removed and sent to the Malfunction Lab. No conclusions were available at the time of this writing.

All cabling and sensors were inspected and determined to be in nominal condition with the exception of the aft dome area and two accelerometers. Because the exit cone was separated at apogee, there was a greater amount of heating and sooting inside the aft skirt than there has been in the past. There was, however, less water impact damage. In the past much of the cabling is completely torn off. The cabling on the aft domes on this flight remained intact at the connectors. This caused a problem in that the cables hung down around the nozzle and the divers had to work around them to insert the nozzle plug. The divers were told that they could cut these cables if the problem occurs in the future.

Two accelerometers, BO8D7175A and BO8D8177A were not tightly secured to their mounting blocks at the time of inspection. These accelerometers are inspected after the accelerometer assemblies are hydrolased from the motor and disassembled. data was reviewed and appears to be normal, indicating that the loosening was a post-flight event. Since the accelerometers are enclosed in a fairing, there is no debris concerns with the loose accelerometers. All accelerometers and low pressure fairings were tightly bonded to the motor cases.

3.2 Data Performance Summary

360L003 contained 531 channels of instrumentation - 417 DFI. 6 OFI, and 108 GEI. Of the 417 channels of DFI, 28 were waived. 375 (96.4%) of the remaining 389 functioned properly throughout their respective mission phase. 105 (97.2%) out of 108 GEI gages and 6 (100%) OFI gages functioned properly throughout their phase of the mission. Excluding gages which were waived, 486 (97%) of the remaining 503 DFI, GEI and OFI gages performed as expected. This is an acceptable percentage. All launch commit criteria gages were functioning prior to launch.

Girth gages on both the right and left hand motor showed data spikes similar to those seen on 360L001 and 360L002. The data spikes occur during ignition transient, and seem to be present only in girth gage data. Also, several girth gages on the right motor showed a .25 second lag from the expected strain curve. The causes of these anomalies have not been determined, although there is reason to believe that they are related.

Approximately 29% of nozzle and aft dome instrumentation was lost during max reentry or chute deployment (Appendix B). The loss of these measurements severely reduces the ability to measure and understand splash down loads.

4.0 CONCLUSIONS

4.1 Hardware Condition

The condition of the instrumentation and associated TPS is excellent. The MTI and MSFC Teams agree that there are no debris issues. However, at the request of the Debris Team some cork samples were evaluated at the Malfunction Lab to determine if cork next to the kick-ring joint could have come off in Flight. Lab tests were inconclusive.

4.2 Data Conclusions

The data recovered from 360L003 was good with few exceptions. A few anomalies were noted on girth gages during the ignition transient (Appendix B). Data from these instruments seemed to be good through the remainder of the flight.

Instrument losses in the nozzle area during descent due to thermal curtain break-up has limited the amount of nozzle splash down data that is available.

Due to the loss of much of the aft dome/nozzle instrumentation, adequate data is not available to determine splash down loads. Since this is a time period where adequate data was not obtained from the SRM Program, and previous RSRM flights have had similar losses, there is no existing data to verify these loads.

DFI needs to continue as long as there are areas that is not fully understood or there are loads that are not verified. If DFI is continued, a design change is required to better protect the sensors and cabling installed on the aft dome and nozzle.

5.0 DISCUSSION

5.1 Hardware Inspection

The TPS had minimal damage. There were 11 aft edge hits on the left RSRM and 10 hits on the right RSRM. The largest cork damaged area was on the left RSRM at station 539, 105°. There was a 4 by 6 inch piece of cork (see figure 1) that was torn away due to debris impact causing cohesive failure in the cork. There was no evidence of heat effect in the damaged area.

There was no evidence of unusual erosion or heat affect on any of the cork runs. However, the aft segments were heavily sooted. This is a result of severing the exit cone at apogee. Because the exit cone was shorter during a greater portion of the flight, there was substantially more heat in the aft skirt area. This caused the aft skirt foam to burn and many of the hydrazine lines to detonate adding to the heat and soot inside the aft skirt and on the aft segment.

The DFI cork just forward of the kick-ring joint had areas of missing or broken cork intermittently around the full circumference (see Figure 2). This is a typical condition that has been observed on past flights. This damage was attributed to air and water flowing through the joint at splash-down. In a few locations on this flight, there were soot deposits on the broken edge of the remaining cork. Because of the soot the Ice and Debris Team asked that a squawk be written. The squawk was submitted with non-concur signatures from both the Morton Thiokol and the MSFC Teams. Pieces of the cork were removed and Looking at the back of the removed cork, a soot trail was evident leading from the joint interface to the were the cork was missing (see figure 3). Figure shows that the sooting only occurred on the forward edge of the damaged area. The clean aft edge indicates that the cork was not lost in flight. The Teams concluded that light sooting was present on past flights and that the heavier sooting on this flight was caused by an increased amount of soot trapped in the aft skirt at splash-down. with the Ice and Debris Teams insistence, a Problem Report was generated. Action was assigned to the KSC Malfunction Lab to determine when the soot was deposited. Results were inconclusive.

The Operational Pressure Transducers (OPTs) were inspected prior to and after removal from the motors. One OPT on the right hand motor was found to have some case damage (see figure 4). This damage was noted prior to removal from the motor. A D.R. search was accomplished. No past damage was indicated. When the damage occurred is not known. All other inspections were as expected. All transducers were tight with no evidence of any leakage, the connectors and wiring were all properly secured, and the ports were open.

The accelerometer and low pressure fairings were inspected and found to be in good condition and securely bonded to the motors. The accelerometer blocks were then hydrolased from the motors and disassembled. An internal inspection was performed noting that two accelerometers were not tight against their respective These were both axial accelerometers and were mounting blocks. located at station 1479.5, O degrees on the right RSRM and station 839.5, 0 degrees on the left RSRM. The data from these sensors appear to be okay, indicating that the sensors came loose after flight. During the hydrolase operation, the cork ramp on the front of the accelerometer is the first thing to break away from the motor. With the ramp missing, the hydrolaser can be sprayed directly into the fairing loosening the accelerometers.

Since the actual accelerometer is completely enclosed in a fairing, and the fairing was securely bonded to the motor, there is no debris concern associated with a loose accelerometer even if it occurs during flight.

Water impact damage on the aft dome was less than that observed on the past two flights. The instrumentation cables that are bonded to the aft dome have been torn completely off the motor in the past. On this flight the cables remained attached at both connectors. The loose part of at least one of the cables hung down around the nozzle opening causing the divers some problem when they tried to install the nozzle plugs. The divers were instructed that these cables could be cut if they are in the way in the future.

5.2 Measurement Performance

A list of instrumentation is contained in Appendix B, C and D. These tables include gage locations and observations made while reviewing the data.

5.2.1 DFI

The DFI on 360L003 consisted of 417 channels (appendix B) of instrumentation. Before launch, 28 gages were damaged or flagged as not functioning. These gages were waived. Of the remaining 389 gages, 375 (96.4%) performed properly.

Data spikes similar to those seen on 360L001 and 360L002 were also observed on 360L003. They occurred on girth gages on both right and left motors. The spikes were concentrated on the right motor, with a single spiking gage on the left forward segment. The spikes on both motors occurred at approximately .25 seconds.

Girth gages on the right RSRM, forward and center field joints exhibited an unexpected lag in the strain curve, in which the data showed no apparent strain for approximately .25 seconds. After .25 seconds the strain curves were as predicted. Spikes were not observed on gages that showed a data lag.

The cause of these girth gage data anomalies has not been determined, although the data spiking and lagging phenomena are probably related. Further study of the problem needs to be completed to determine why data spiking and lagging are seen on girth gages, and not on biaxial strain gages.

The igniter pressure transducers on both motors read low during the early part of the flight. This was the result of polytropic heating. This problem is explained in detail in TWR-15968.

Instrumentation installed in the nozzle/aft dome consisted of 16 girth gages and 52 strain gages. Of these, 45 gages were functioning during accent. However, 20 measurements were lost prior to splash down due to reentry loads and/or chute deployment.

Those losses are a result of the breakup of the thermal curtain, exposing the sensors and cables to excessive heating and aerodynamic loading. The sensors and cables either failed due to the heat or break due to aerodynamic loading and/or the shock of chute deployment.

Instrument losses in the nozzle area could be reduced by increasing thermal protection, and making the instruments more resistant to shock loading.

Measurement losses in the nozzle area on 360L001, 360L002, 360L003, as well as on the SRM Program has limited the amount of nozzle splash down data that is available. The loss of data has hampered model verification, and has made determining water impact loads difficult.

5.2.2 GEI

The GEI instrumentation on 360L003 consisted of 108 temperature sensors (appendix C), RTD's, which monitor motor case temperature while the motor is on the pad. Of the 108 GEI gages, 105 (97.2%) were functioning before launch. One gage was lost on each of the forward center segment. One gage on the right hand case-to-nozzle joint was reading low.

5.2.3 OFI

The OFI on 360L003 consisted of three Operational Pressure Transducers (OPT), (appendix D) per booster. These OPTs monitor motor chamber pressure during flight. These pressure transducers are used to initiate the SRB separation cue and give ballistic data to verify performance variation. All OFI pressure transducers functioned as expected.

APPENDIX A

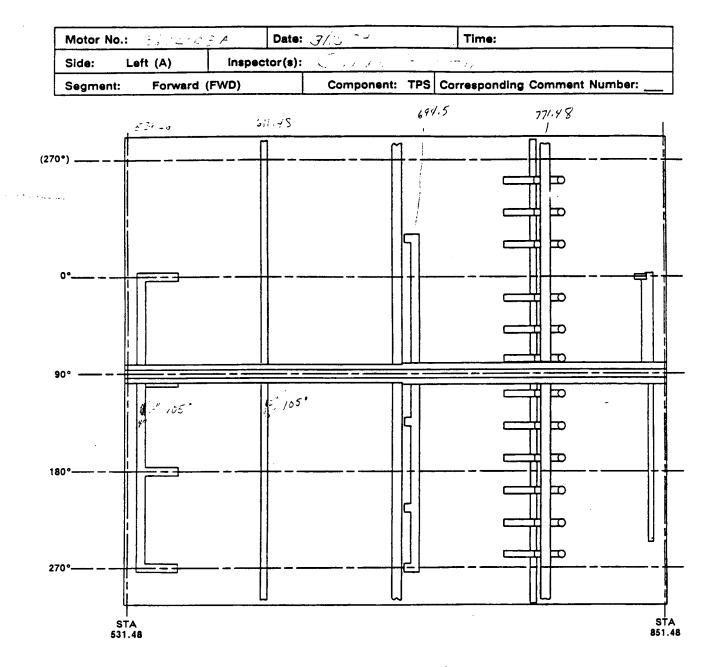
Post Flight Evaluation Forms

Table A-I
Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No.: STS - 029 Date: 16 MAR 1989 Time:							
Side:							
Inspector(s): Bryan Baugh							
Segment: ☐ Forward (FWD) ☐ Forward Center (FCS) ☐ Aft Center (ACS) ☐ Aft (AFT)							
Component: TPS							
Comment: TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Starting Ending Starting Ending Circumferential Axial Radial Condition Station Station Degree Degree Width Length Depth (Observation Location Location Location Location (In.) (In.) (In.) Code) (In.) (In.) (Deg.) (Deg.) (WIDTH) (LENGTH) (DEPTH) TISDM 539 105 2 .75 .25							
Notes / Comments							
Notes / Comments 1, AFT EDGE HITS.							
2. Sheared off in base work, wirang is exposed							

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Observation Drawing Worksheet - L.H. Forward Segment TPS Layout Figure A-1

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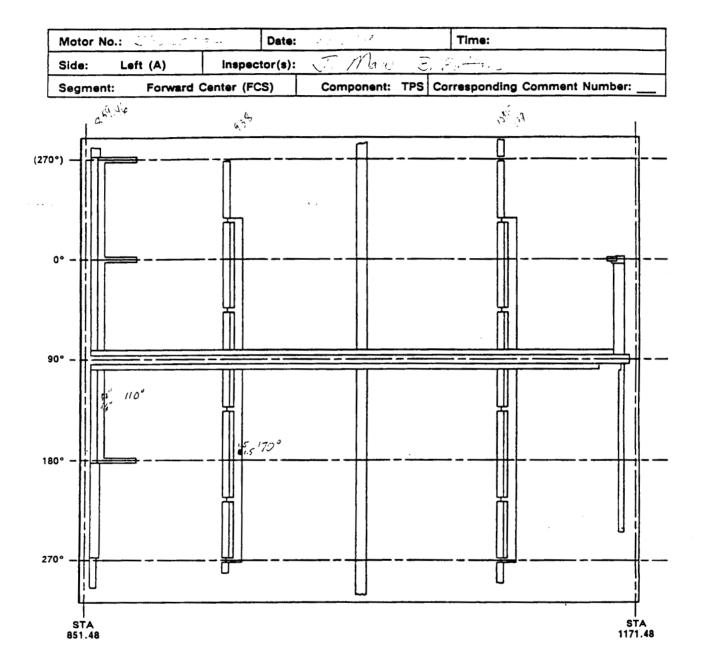
SEC PAGE 7

Table A-I

	111901	mentation iP	o condition -	Evaluation C	TOURDIT TOURDITO		
Motor No.: 57	15-029	Date: / 6	Mar 19	789 Time	:		
Side:							
Inspector(s):	Bryan	Baugi	4				
Segment:							
Component:	TPS						
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.87" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Condition (Observation Code) TPS DM TPS DM	Starting Station Location (In.) 860 738	Ending Station Location (In.)	Starting Degree Location (Deg.) // 0	Ending Degree Location (Deg.)	Circumferential Width (In.) (WIDTH) 2 /.5	Axial Length (In.) (LENGTH) • 75	Radial Depth (In.) (DEPTH) , 25
Notes / Comme	ents			· · · · · · · · · · · · · · · · · · ·			
1							
Comment shee	ntis) attached	· ×	- yes	no			

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Observation Drawing Worksheet - L.H. Forward Center Segment TPS Layout Figure A-2

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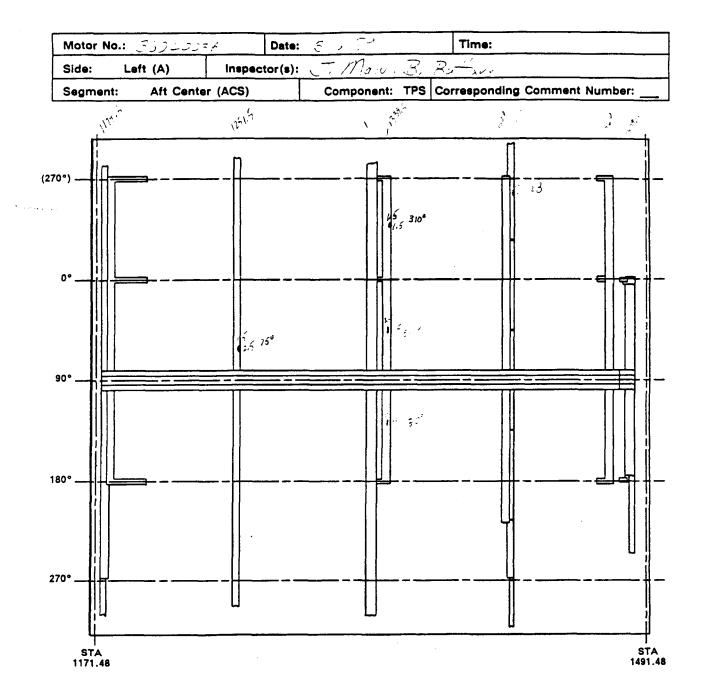
Table A-I Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No.: STS - 02 9 Date: 16 MAR 1989 Time:							
Side: 🔀 Left (A) 🔲 Right (B)							
Inspector(s): Bryan Baugh							
Segment: Forward (FWD) Forward Center (FCS) Aft Center (ACS) Aft (AFT)							
Component: TPS							
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Starting Ending Starting Ending Circumferential Axial Radial							
Notes / Comments // AFT EDGE HITS Comment sheet(s) attached?							

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REV. B

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Observation Drawing Worksheet - L.H. Aft Center Segment TPS Layout Figure A-3

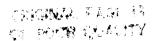
REV. A

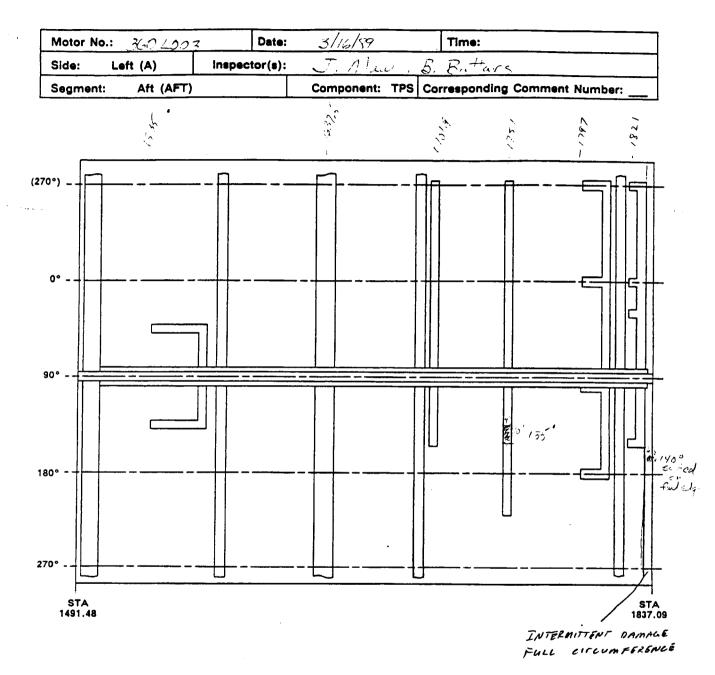
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Table A-I Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No.: 5	TS-029	Date: 16	MAR 198	P9 Time):		
Side: 🔀 Left (A) 🔲 Right (B)							
Inspector(s): Bryan Baugh							
Segment: [Forward (F)	VD) Form	ard Center (F	CS) Af	t Center (ACS)	Aft (AFT)	
Component:	TPS					,	
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Condition (Observation Code) TPSOM 3) TPS DM	Starting Station Location (In.) / 75/ / 833	Ending Station Location (In.)	Starting Degree Location (Deg.) // 35	Ending Degree Location (Deg.)	Circumferential Width (In.) (WIDTH) 10 2	Axial Length (In.) (LENGTH)	Radial Depth (In.) (DEPTH) . /25
Notes / Comme	ents		· · · · · · · · · · · · · · · · · · ·			·	-
2. AFT 3. STA AFT SKI FULL C	er Joint.	HITS AS 36 A LOCATION RENGE . S	REAS WE IS ARE IN IZE RANG	RE CORK ONTERMITES FROM	WAS BLOWN TENTLY SPA I'M CRACK 140° HAS	TO 3×14	INCH;
Comment shee	t(s) attached?	×	ves	no		<u></u>	





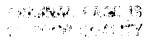
Observation Drawing Worksheet - L.H. Aft Segment TPS Layout Figure A-4

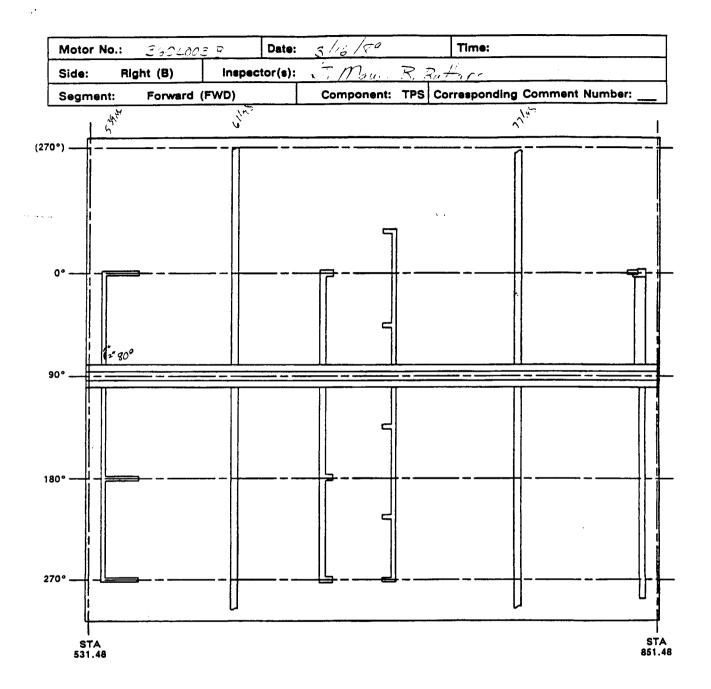
REV. A

Table A-I instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No ·	TS-029	Date: /6	MAR 19	89 Time	:		
Motor No.: STS - 029 Date: 16 MAR 1989 Time: Side: □ Left (A) ☒ Right (B)							
 							
	Bryan	Baug				_	
Segment:	Forward (F	WD) Forw	ard Center (F	CS) L Aft	Center (ACS)	Aft (AFT)	· · · · · · · · · · · · · · · · · · ·
Component:	TPS				-		
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Condition (Observation Code) TPSOM	Starting Station Location (In.) 540	Ending Station Location (In.)	Starting Degree Location (Deg.)	Ending Degree Location (Deg.)	Circumferential Width (In.) (WIDTH)	Axial Length (In.) (LENGTH)	Radial Depth (In.) (DEPTH) , 2.5
Notes / Comme	ents						
1, AFT	EDGE	HIT					
							···
Comment shee	et(s) attached	17	yes	_ no			

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Observation Drawing Worksheet - R.H. Forward Segment TPS Layout Figure A-5

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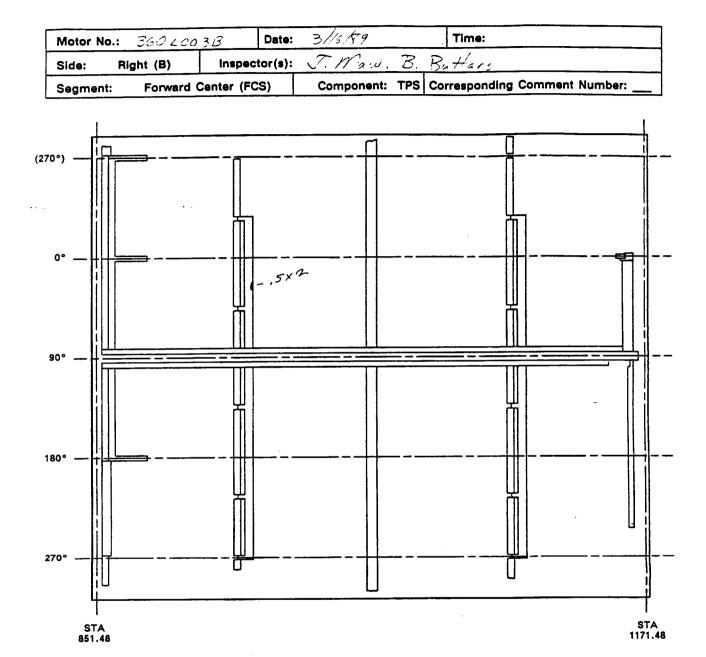
PAGE 11 REV. A

Table A-I Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No.: 57	5-029	Date: 16	MAR 19	89 Time	:		
Side: Left (A) X Right (B)							
Inspector(s): Bryan Baugh							
Segment:	Forward (FW		ard Center (F	CS) Aff	Center (ACS)	Aft (AFT)	
Component:	TPS						
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.87" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:							
Condition (Observation Code) TPSDM	Starting Station Location (In.) 939	Ending Station Location (in.)	Starting Degree Location (Deg.)	Ending Degree Location (Deg.)	Circumferential Width (In.) (WIDTH)	Axial Length (In.) (LENGTH)	Radial Depth (In.) (DEPTH) , 25
Notes / Comme					······································	<u></u>	·
1 AFT E	PGE HI	7					
Comment shee	t(s) attached?	×	ves	no			

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Observation Drawing Worksheet - R.H. Forward Center Segment TPS Layout Figure A-6

REV. A

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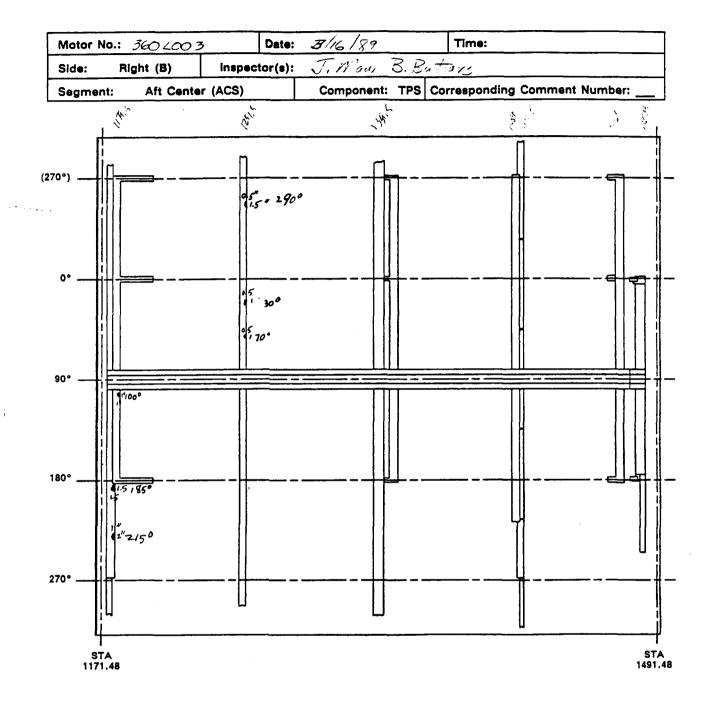
Table A-I
Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Motor No.: 575-029	Date: 16	MAR 19	89 Time):			
Side: Left (A) [2	₹Right (B)				<u> </u>	
Inspector(s): Bryan	Baugh				·		
Segment: Forward (FV	VD) Forw	vard Center (F	CS) 🔀 Af	t Center (ACS)	Aft (AFT)		
Component: TPS							
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.67" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? Ves no / yes no / yes no / If any of these conditions exist, note:							
Starting Condition Station (Observation Location Code) (In.) TPSOM 1178 TPSOM 1178 TPSOM 1180 TPSOM 1252 TPSOM 1252 TPSOM 1252	Ending Station Location (in.)	Starting Degree Location (Deg.) 2.15 1.85 1.00 3.0 2.90	Ending Degree Location (Deg.)	Circumferential Width (In.) (WIDTH) 2 1.5	Axial Length (In.) (LENGTH) / //.5 / /5 /5	Radial Depth (In.) (DEPTH) .25 .25 .25 .25	
Notes / Comments /, AFT EDGE	HITS	•					
Comment sheet/e) attached	<u> </u>	Ves	20		<u> </u>		

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Observation Drawing Worksheet - R.H. Aft Center Segment TPS Layout Figure A-7

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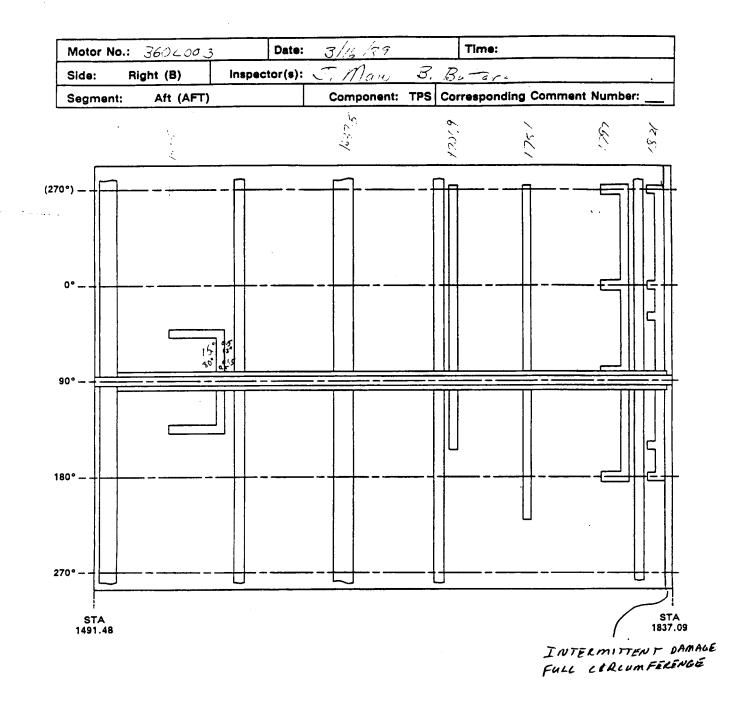
SEC PAGE 13

Table A-I Instrumentation TPS Condition - Evaluation Checkoff Worksheet

Evaluation officering workships
Motor No.: 575 - 029 Date: 16 MAR 1989 Time:
Side: Left (A) 🗵 Right (B)
Inspector(s): Bryan Baugh
Segment: Forward (FWD) Forward Center (FCS) Aft Center (ACS) Aft (AFT)
Component: TPS
TPS Condition A. Charred/Heat Affected Material (HTAFF)? B. Missing Material > 1.87" X 1.67" (TPSVD)? C. Debris/Impact Damage (TPSDM)? D. Unbonds (DEBND)? If any of these conditions exist, note:
Starting Ending Starting Ending Circumferential Axial Radial Condition Station Station Degree Degree Width Length Depth (Observation Location Location Location Location (In.) (In.) (In.) (Code) (In.) (In.) (Deg.) (Deg.) (WIDTH) (LENGTH) (DEPTH) TPSDM 1550 80 1.55 .25
Notes I Comments 1. ENTIRE SEGMENT HEAVILY SOOTED 2. AFT EDGE HIT 3. STA 1833 HAS 32 AREAS WERE CORK WAS BLOWN AWAY FROM THE AFT SKIRT JOINT. LOCATIONS ARE INTERMITTENTLY SPACED AROUND FULL CIRCUMFERENCE, SIZE RANGES FROM a
Comment sheet's) attached?

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Observation Drawing Worksheet - R.H. Aft Segment TPS Layout Figure A-8

REV. A

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Table A-II

Pressure Transducer (OPTs) - Evaluation Checkoff Worksheet

Inspector(s): Bryan Bo	ansades (OP1s) = 1	The state of the s	WG KSHOOL
Motor No.: 575 - 029	Side: 🔀 Left(A	Right(B)	Date: 15 Mar 1989
Inspection: Installed	L	Removed	Component: Instrumentation
			Component: Instrumentation
I. Evidence of Combustion P A. Transducer, 40° 500	roduct Leakage (SO) 62	-	∠ no
B. Transducer, 180°	— ,	yes	no no
C. Transducer, 270°	73	yes	no
D. Transducer, 115°		yes	NA no
II. Physical Damage (Nicks, S	cratches, Gouges (E		
A. Transducer, 40°		yes	no
B. Transducer, 180°		yes	no
C. Transducer, 270°		yes	no
D. Transducer, 115°		NA yes	NA no
III. Loose Transducer (LOOSE)?		
A. Transducer, 40°		yes	no
B. Transducer, 180°		yes	no no
C. Transducer, 270°		yes	no no
D. Transducer, 115°		yes	NA no
IV. Damaged Threads (DBOLT), after removal only		
A. Transducer, 40°		yes	no
B. Transducer, 180°		yes	no
C. Transducer, 270°		yes	no
D. Transducer, 115° V. Plugged Port (PLGPT), aft	or ramaval anlu?	yes	no
V. Plugged Port (PLGPT), aft A. Transducer, 40°	er removal only r	100	
B. Transducer, 180°		yes	no no
C. Transducer, 270°		yes	no
D. Transducer, 115°		yes	no
If yes, note the indicated data	!		
Condition	Degree		
(Observation	Start	•	
Code)	Location	Length (in.)
'	(Deg.)	(If applicabl	
DAMML	270	.10	•
			-
			-
			-
			-
Notes / Comments SERIES OF	HACK MARIS	s on c	ENTER OF
CASE 3- 5 1	NEHES ABOU	E BELL	+ HOWELL
LOGO. WORST	SCRATCH I	5 .1 401	Vax 2,01 DEER
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Table A-II

Pressure Transducer (OPTs) - Evaluation Checkoff Worksheet

Pressure In	Pressure Transducer (OPTs) - Evaluation Checkoff Worksheet						
Inspector(s): Bryan Baugh							
Motor No.:	Side:	Left(A)	☐ - Right(B)	Date: 15 Mar 1989			
Inspection: Installed		⊠ Rea	moved	Component: Instrumentation			
I. Evidence of Combustion Pr	oduct Le	akage (SOOT)?				
A. Transducer, 40°			yes	no			
B. Transducer, 180°			yes	no			
C. Transducer, 270°		· · · · ·	yes	no			
D. Transducer, 115°			1/A yes	NA no			
II. Physical Damage (Nicks, Sc	cratches,	Gouges (DÁI	MML))?				
A. Transducer, 40°			yes	no			
B. Transducer, 180°			yes	no			
C. Transducer, 270°		_	∠ yes	no			
D. Transducer, 115°		7	A yes	NA no			
III. Loose Transducer (LOOSE)	2 NA						
A. Transducer, 40°			yes	· no			
B. Transducer, 180°		-	yes	no			
C. Transducer, 270°		_	yes	no			
D. Transducer, 115°		_					
IV. Damaged Threads (DBOLT)	after re	- Sylaa levom	yes	no			
A. Transducer, 40°	, 41101 10	inoval Only	1/00	V			
B. Transducer, 180°		_	yes	no			
C. Transducer, 270°		_	yes	no no			
		_	yes	no no			
D. Transducer, 115°			yes	no no			
V. Plugged Port (PLGPT), afte	r remova	only?		_			
A. Transducer, 40°		_	yes	no			
B. Transducer, 180°			yes	no			
C. Transducer, 270°		_	yes	no			
D. Transducer, 115°		<u>r</u>	YA yes	NA no			
If yes, note the indicated data:							
Condition	Degr	.60					
(Observation	Sta	rt					
Code)	Locat	ion	Length (In.)				
	(Deg	1.)	(If applicable)			
	, ,	•	(,			
							
							
							
Notes / Commente							
Notes / Comments SEE INSTALLED CONDITION							
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Table A-ii

Pressure Transducer (OPTs) - Evaluation Checkoff Worksheet

	ug H	(0.13) 210		
Motor No.: 575 - 29		Left(A)	☐ Right(B)	Date: 15 Mar 1989
Inspection: Installed		Rer	moved	Component: Instrumentation
Motor No.: 575-29	Side: oduct Les 90 R 92 R 137 13 R cratches,	Gouges (DAF	moved	Component: Instrumentation
Notes / Comments				

DOC NO. TWR-16475, Book 1 VOL IX

Table A-II

Pressure Transducer (OPTs) - Evaluation Checkoff Worksheet

Inspector(s): Bryan Baugh							
Motor No.: 575 -29	Side: Left(A) Right(B)	Date: 15 Mar 1989					
Inspection: installed	Removed	Component: Instrumentation					
1. Evidence of Combustion Pro	oduct Leakage (SOOT)?						
A. Transducer, 40°	yes	no					
B. Transducer, 180°	yes	no					
C. Transducer, 270°	yes	no					
D. Transducer, 115°	yes	no					
II. Physical Damage (Nicks, Sc		1/					
A. Transducer, 40°	yes	no					
B. Transducer, 180°	yes	no no					
C. Transducer, 270°	yes						
D. Transducer, 115°	yes	no					
III. Loose Transducer (LOOSE)		no					
A. Transducer, 40°	yes	no no					
B. Transducer, 180°	yes	no					
C. Transducer, 270°	yes	no					
D. Transducer, 115° IV. Damaged Threads (DBOLT),	after removal only?						
A. Transducer, 40°	, after removal only?	✓ no					
B. Transducer, 180°	yes	-V no					
C. Transducer, 270°	yes	no v no					
D. Transducer, 115°	yes	no					
V. Plugged Port (PLGPT), afte							
A. Transducer, 40°	yes	✓ no					
B. Transducer, 180°	yes	v no					
C. Transducer, 270°	yes	no					
D. Transducer, 115°	yes	no					
If yes, note the indicated data:	 *						
Condition	Degree						
(Observation	Start						
Code)	Location Length (in.)					
,	(Deg.) (If applicable						
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		-					
		-					
		•					
Notes / Comments							
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OBSERVATION CLARIFICATION FORM

Motor No. 575 - 029	Inspector(s) Bry	en Baugh	
☐ Left (A) 🗵 Right (B)			Date 18 Ma - 89
Segment:	☐ Forward Center	Aft Center	□ Nozzie ,
Joint:		Component: Acce	elerometer
Location: Starting Station	(In.) 1479.5	_ Ending Station (In.)	-
Starting Degree		Ending Degree	
Size: Circumferentia	Width (In.)	Axial Length (In.) _	
Radial Distance	(ln.)	_ / /	_
Description: Axial	accelero	meter 15	oose,
(Approxin	rately 1 Th	read)	
	· / A/		
Ingpectret	rd alter re	movel from	the motor
	· · · · · · · · · · · · · · · · · · ·		
Sketch observation below			entation and dimensions.
Show as much detail as no	ecessary to explain the	observation.	
			
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Figure A-9

DOC NO. TWR-16475, Book 1 VOL IX
SEC PAGE 14

OBSERVATION CLARIFICATION FORM

Motor No.	STS-029	inspector(s)	Bryan B	augh	
	☐ Right (B)				ate 18 Mar 8
Segment:	⊠ Forward	☐ Forward Cente	r 🔲 Aft Cente	r 🔲 Aft	Nozzie
Joint:			Compo	nent: Acce	lerometer
Location:	Starting Statio	n (In.) 839.5		Station (In.)	
	Starting Degre	·	Ending	Degree	
Size:	_	al Width (In.)	Axial L	ength (in.) _	
	Radial Distanc	e (ln.)			
Description	A	accelerom	eter 15	loose.	<u></u>
		inatoly	+ thre	ad)	
Z	nspected	alter	remova/	from	the motor
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					entation and dimension
Show as m	uch detail as n	necessary to explain	the observation.		
					
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Figure A-9

DOC NO. TWR-16475, Book 1 VOL IX
SEC PAGE 14 REV. B

OBSERVATION CLARIFICATION FORM

Motor No.	575-029 Inspector(s) Bryan Baugh
	☑ Right (B) Date 17 Mor 8
Segment:	☐ Forward ☐ Forward Center ☐ Aft Center ☐ Aft
Joint:	Component: DFI/CEI CABLES
Location:	Starting Station (In.) Ending Station (In.)
	Starting Degree Ending Degree
Size:	Circumferential Width (In.) Axial Length (In.)
	Radial Distance (in.)
Description	The second section of the section of the sect
Cab.	
Dire	· · · · · · · · · · · · · · · · · · ·
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of.	the nozzle.
Sketch obs	servation below or attach worksheets and list below. Indicate orientation and dimensions.
	nuch detail as necessary to explain the observation.
	don detail de necessary to explain the observations
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Figure A-9

SRB/SRM POSTFLIGHT HARDWARE ASSESSMENT SQUAWK SHEET						
SQUAVVK SHEET						
2. DETECTED DURING 3. WORK ARI	Λ 🦟	4. SQUAWK 10 NUMBER	4A. SRB SIDE			
	SEGMENT 7. PART NUN					
AFT SEGNEUT CORK CLOSEDL	-T 147661	46-01 1				
11. NHA/PN 12. STS NUMBER	13. REPORTED BY (NAME/OR		14. DATE/TIME			
10100-0050 STS 29R	15A. PHOTO ORGANIZATION	EVENS NASA	3/16/84 1600			
109455-1 Thru -5	USBI I MT	I OTHER				
16. ITEM 17. PROBLEM DISCRIPTION						
DEI CORK CLOSEOUT A	THE AFT	KIRT FIELD	70,27			
AT THE FOLLOWING	LOCATIONS	15 Kissible	AREAS			
LIHERE CORK IS MIS	sing 24002	SIGNS OF	, SOOTING			
INDICATIVE OF CUT						
DEGREE LOCATIONS	5 0 270° 7	275 280°	330,			
340, 350, Note:	Better degree as	oproximations and	dimensions appear to			
356 (33/4"x1"/4"), 268°("	(3/4× 2 5/8"), 278°	(43/4"x15/8"),285	3°(5'xz!/4"),			
300 (21/41/14") > DUAWI	7 312 (P.X 13) 7 12 UED TES	18"), 326°(41)	4" X192"), +€			
DEBRIS TEAM.						
18. ASSESSMENT TEAM CONCURRENCE NOW CON BUS Z Bay		1 4/5/	10			
		edie H. Nund	ley			
CONTRACTOR ASSESSMENT ENGINE	ER •	MSFC ASSESSMENT E	NGINEER			
19. EXECUTIVE BOARD DISPOSITION	20. PR NUMB	ER				
PR REQUIRED PR NOT REQUIRED						
	······					
+4 ⁴ / ₁						
		· · · · · · · · · · · · · · · · · · ·				
22. APPROVALS						
CONTRACTOR BOARD MEMBER/DATE		BOARD CHAIRMAN	DATE			

								·		
		SRB/SRM POSTFLIGHT HARDWARE ASSESSMENT SQUAWK SHEET							Page of	
				1						
H		red during	11-	J. WORK AREA	AF			008	4A. SAB SIDE	-
	WORK	UNIT CODE	6. PART NAM	TIACT SEC	111	7. PART NUM		8. SERIAL NI		RH 0. QUANTITY
Haff	FT S	ECMENT	COPLIK	114FT 560	sme ur T	14766	47-01	1		
	NHA/PR	i i	12. STS NUMB	ER IS	. REPORTED	BY (NAME/OR	iG) /		14. DATE/TIM	1E
	- L. I	0050	575		- CHAR		حسم /)ASA	3/16/89	1600
	161 161	SRAPH ID NUMBER	•		ia. Photo C USE	MOITASIMADRO		THE		
	TEM	449-02	DISCRIPTION	P Location)	U 03E	I L WI	<u> </u>	THEH		
HH										
		7								
		CORK	CLOSEC	out At	THE	AFT	SKIRT	FIELD	70,20	τ
		AT 7	THE FO	OLLOWING.	 G _0	CATTON	5 15	Missi	26 A	REAS
										4
1		MHEDE	CORK	is wi	SSING	SHOW	5 51	243	o F	
		SOUTH	الحد ما	とにんていど	٠.	C 4 17 16	٠	90	. 70	
		3001.	<u> </u>	- CK C T C	٥٠	COICIC	No27	Ficioic	. (0	
	ŧ	SPLASI	1 Dow	<u>ر در</u>						
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				CATIONS						
		Respect	ive dim	ensions ar	c. 🥰	1	2/2 x2"	3"x1"	2,33/4	x2/4"
		NOTE: 7	HIS SH	PUACK OU ACK	15	LEQUE	STE O T	54 Th	,	
	E S	NERD					1-			
	ASSESSA	MENT TEAM CONC	URRENCE	· · · · ·		1	·			
	Conc	Ž. 7	Back	1_		$\gamma l_{\cdot \cdot}$	1. 7/	7/1. 10		
	C C	CONTRACTOR	ASSESSME	NT ENGINEER		- 7 yu	ME NI	NUNCLE ESSMENT EN	1000550	
	846	E BOARD DISPOS		TI CHOMEEN				ESSMENT E	GINEER	
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ORIGINAL PAGE BLACK AND WHITE PHOTOGRAPH

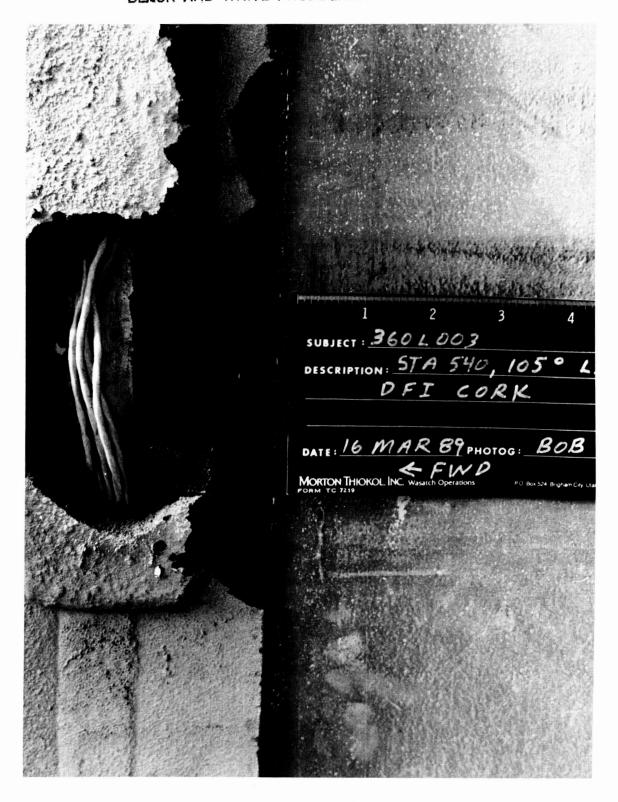


Figure 1

ORIGINAL PAGE BLACK AND WHITE PHOTOGRAPH

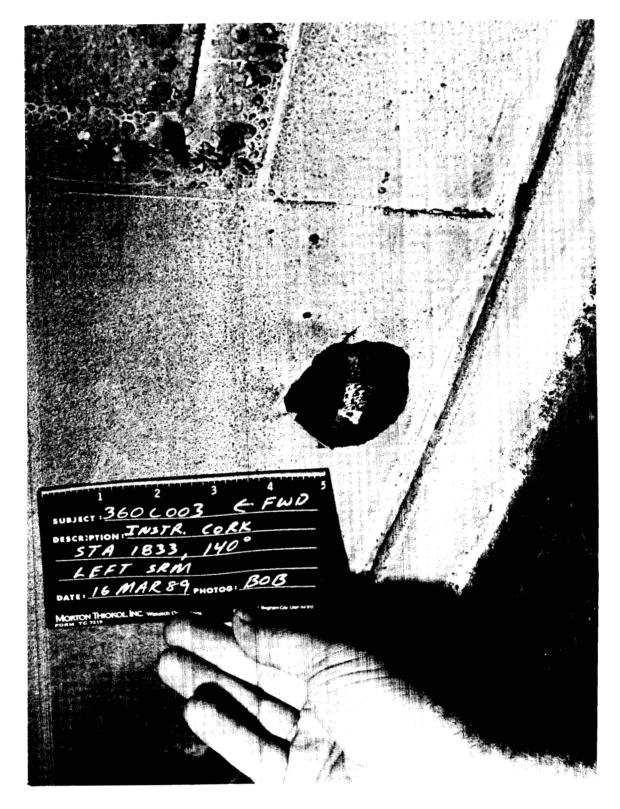


Figure 2

ORIGINAL PAGE BLACK AND WHITE PHOTOGRAPH

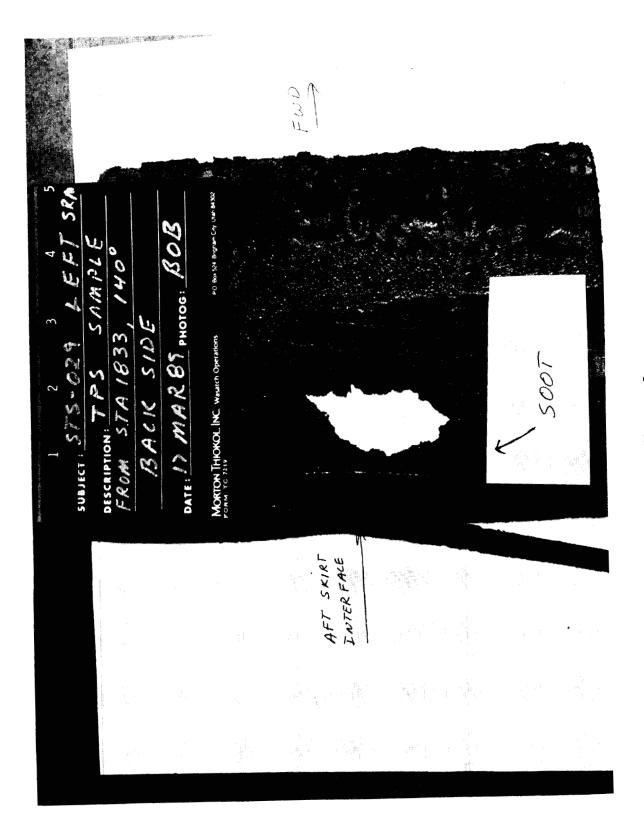


Figure 3

ORIGINAL PAGE BLACK AND WHITE PHOTOGRAPH



Figure 4

APPENDIX B

DFI Instrumentation List

SH. NO BI

. CONDITION																						LOST AT 270 SEC.	SWITCHED WITH BO8G7262A, DATA LOST CLIPPED	SWITCHED WITH BOSG7261A			LOST AT 340 SEC.		SPIKE AT 320 AND 390 SEC.
COMMENTS			USBI INSTALLED	USBI INSTALLED	USBI INSTALLED	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	AFT SEG			EXIT CONE	EXIT CONE	EXIT CONE	EXIT CONE	FWD SEG	FWD SEG		AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	CTR	CTR		CTR	CTR	AFT CTR SEG	CTR	FWD SEG
KSC																													
MEAS TYPE			VIB. SRB	VIB. SRB	VIB. SRB	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM			VIB. SRM	VIB. SRM	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, GIRTH						
RANGE			+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+6K,-2K
MEAS DIR	i i i i	_	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	TANG.	AXIAL	TANG.	AXIAL	TANG	TANG	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	НООР
STA		LEFT RSRM	500.00	500.00	500.00	1159.50	1159.50	1159.50	1829.50	1829.50	1829.50	1914.00	1914.00	1914.00	1914.00	839.50	839.50	1479.50	1479.50	1479.50	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	611.48
ANG			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	85.0	85.0	270.0	0.0	0.0	0.0	0.0	180.0	0.0	0.0	270.0	270.0	180.0	180.0	95.0	95.0	N/A
INST.NO			B08D7160A	B08D7161A	B08D7162A	B08D7164A	B08D7165A	B08D7166A	B08D7167A	B08D7168A	B08D7169A	B08D7171A	B08D7172A	B08D7173A	B08D7174A	B08D7175A	B08D7176A	B0807177A	B08D7178A	B08D7179A	B08G7259A	B08G7260A	B08G7261A	B08G7262A	B08G7263A	B08G7264A	B08G7265A	B08G7266A	B08G7269A

																												<u>ب</u> ر						
	INSTRUMENT CONDITION	DATA SPIKE AT 20 AND 26 SFC.			GAGE LOST AT 370 SEC.			GAGE LOST AT VAB. WAIVED	SPIKE AT 320 AND 370 SEC.			GAGE LOST AT VAB, WAIVED		SPIKE AT 320 AND 340 SEC.	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED		GAGE LOST AT VAB, WAIVED	SPIKE AT 370 SEC.	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED		SPIKE AT 370 SEC.				SPIKE AT .13 SEC., LOST AT 300 SEC.	LOST AT 300 SEC.		BAD, NOISY	BAD, NOISY	LOST AT 300 SEC.	
	COMMENTS	FWD SEG	FWD SEG	FWD SEG		CTR	CTR	CTR	CTR	CTR	CTR	CTR	AFT CTR SEG	AFT CTR SEG	CTR	AFT CTR SEG	AFT CTR SEG		AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	FIXED HOUSING	AFT DOME	AET DOME
KSC	INST	81 81 81 81 81 81 81	×	×	×	×					×	×	×	×					×	×	×	×				×	×							
MEAS	TYPE	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH			STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	
	RANGE	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K2K
MEAS	DIR	H30P	HOOP	H00P	H00P	HOOP	HOOP	H00P	H00P	H00P	H00P	H00P	H00P	H00P	HOOP	HOOP	HOOP	HOOP	HOOP	H00P	H00H	H00H	H00P	H00P	HOOP	HOOP	H00P	HOOP	HOOP	HOOP	HOOP	H00P	HOOP	H00H
	STA		846.78	848.53	850.17	852.58	855.03	857.28	931.48	1091.48	1166.78	1168.53	1170.17	1172.58	1175.03	1177.28	1251.48	1411.48	1486.78	1488.53	1490.17	1492.58	1495.03	1497.28	1637.48	1834.75	1836.20	1859.19	1861.00	1875.65	1872.45	1872.95	1874.85	1875.65
ANG	707	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Α/Α	N/ A/	∀ /¥	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

INSTRUMENT CONDITION	LOST AT 300 SEC.					SPIKE AT 320 AND 370 SEC															BAD, NOISY					LOST AT 250 SFC.		}				
COMMENTS	FIXED HOUSING	FWD DOME	FWD DOME	FWD SEG									CTR	CTR	CTR	CTR	CTR	FWD CTR SEG	CTR	CTR	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG					AFT CTR SEG	CTR	CTR	
KSC INST																																
	STRAIN, GIRTH	STRAIN, BIAX	STRAIN, BIAX		STRAIN, BIAX			STRAIN, BIAX		STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX			STRAIN, BIAX		STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX		STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX		STRAIN, BIAX
RANGE	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K
MEAS	HOOP	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL
STA	1876.25	486.40	486.40	556.48	556.48	556.48	556.48	556.48	556.48	556.48	556.48	876.48	876.48	876.48	876.48	876.48	876.48	876.48	876.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1466.00	1466.00	1466.00	1466.00	1466.00
ANG		5.0	5.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	98.0	98.0	180.0
INST.NO	B08G7315A	B08G7316A	B0867317A	B08G7318A	B08G7319A	B0867320A	B08G7321A	B08G7322A	B08G7323A	B08G7324A	B08G7325A	B08G7326A	B08G7327A	B08G7328A	B08G7329A	B08G7330A	B08G7331A	B0867332A	B0867333A	B08G7334A	B08G7335A	B08G7336A	B0867337A	B0867338A	B08G7339A	B08G7340A	B08G7341A	B08G7342A	B08G7343A	B08G7344A	B08G7345A	B08G7346A

		<u>"</u>																																
	COMMENTS INSTRUMENT CONDITION		GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED							SWITCHED WITH BO8G7375A	SWITCHED WITH BO8G7374A																	SWITCHED WITH BO8G7393A	SWITCHED WITH B08G7392A		LOST AT 340 SEC.	GAGE LOST AT VAB, WAIVED	
	COMMENTS	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG
KSC	i	ĺ																																
MEAS	RANGE TYPE INST	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	RANGE	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K								
MEAS	DIR	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.
į	SIA		1466.00	1466.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00
ANG	 	180.0	270.0	270.0	180.0	180.0	98.0	98.0	0.0	0.0	320.0	320.0	300.0	300.0	285.0	285.0	270.0	270.0	255.0	255.0	220.0	220.0	180.0	180.0	98.0	98.0	0.0	0.0	320.0	320.0	300.0	300.0	285.0	285.0
CM TOUT	INST.NO	B08G7347A	B08G7348A	B08G7349A	B08G7368A	B08G7369A	B08G7370A	B08G7371A	B08G7372A	B08G7373A	B08G7374A	B08G7375A	B08G7376A	B08G7377A	B08G7378A	B08G7379A	B08G7380A	B08G7381A	B08G7382A	B08G7383A	B08G7384A	B08G7385A	B08G7386A	B08G7387A	B08G7388A	B08G7389A	B08G7390A	B08G7391A	B08G7392A	B08G7393A	B08G7394A	B08G7395A	B08G7396A	B08G7397A

LOST AT 320 SEC.	
NOSE ASSY	
STRAIN, BIAX	
+/-2K	
AXIAL	
1829.20	
90.0	

	!!																																
INSTRUMENT CONDITION			GAGE LOST AT VAB, WAIVED	SWITCHED WITH BO8G7400A				GAGE LOST AT VAB, WAIVED							LOST AT 320 SEC.	BAD, NOISY		LOST AT 320 SEC.						BAD, NOISY		LOST AT 320 SEC.				LOST AT 320 SEC.	LOST AT 320 SEC.	LOST AT 320 SEC.	LOST AT 320 SEC.
COMMENTS	 	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FLEX BEARING	FLEX BEARING	NOSE ASSY
KSC																																	
MEAS TYPE	**	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
RANGE	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K,-2K	+6K, -2K	+/-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K, -2K	+6K, -2K	+/-2K	+/-2K	+6K,-2K	+/-2K
MEAS	11	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	AXIAL
STA	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1849.00	1849.00	1829.20
ANG	270.0	270.0	255.0	255.0	220.0	220.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	90.0	180.0	180.0	180.0	180.0	270.0	270.0	270.0	270.0	90.0	90.0	90.0
INST.NO	B08G7398A	B08G7399A	B08G7400A	B08G7401A	B08G7402A	B08G7403A	B08G7404A	B08G7405A	B08G7406A	B08G7407A	B08G7408A	B08G7409A	B08G7410A	B08G7411A	B08G7412A	B08G7413A	B08G7415A	B08G7416A	B08G7417A	B08G7418A	B08G7420A	B0867421A	B08G7422A	B08G7423A	B08G7425A	B08G7426A	B08G7427A	B08G7428A	B08G7430A	B08G7431A	B08G7432A	B08G7433A	B08G7434A

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	INSTRUMENT CONDITION				GAGE LOST AT VAB, WAIVED				GAGE LOST IN FLIGHT	GAGE LOST IN FLIGHT			GAGE LOST AT VAB, WAIVED			GAGE LOST IN FLIGHT										GAGE LOST IN FLIGHT						
	COMMENTS	NOSE ASSY	FWD EXIT CONE	FWD EXIT CONE	THROAT ASSY	THROAT ASSY	EXIT CONE	EXIT CONE	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWO SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD DOME	FWD SEG	FWD SEG	FWD SEG
KSC	INST																													×	×	×
MEAS	RANGE TYPE	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	N PRESS, SRM	J TEMP, SRM	J TEMP. SRM	J TEMP. SRM	J TEMP. SRM
	RANGE	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	0-10 psia	0-10 psia	0-10 psia	0-400 deg	0-400 deg	0-400 deg	0-400 deg									
MEAS			AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.																
	LOC STA DIR	1829.20	1865.00	1865.00	1834.00	1834.00	1908.00	1908.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	486.40	846.30	846.30	846.30
ANG	207	90.0	90.0	0.06	90.0	0.06	90.0	0.06	220.0	220.0	255.0	255.0	285.0	285.0	320.0	320.0	349.0	319.0	289.0	259.0	229.0	199.0	169.0	139.0	109.0	79.0	49.0	19.0	205.0	0.0	120.0	240.0
	INST.NO	B08G7435A	B0867448A	B08G7449A	B08G7450A	B08G7451A	B08G7452A	B08G7453A	B08G7460A	B08G7461A	B08G7462A	B08G7463A	B08G7464A	B08G7465A	B08G7466A	B08G7467A	B07P7390A	B07P7391A	B07P7392A	B07P7393A	B07P7394A	B07P7395A	B07P7396A	B07P7397A	B07P7398A	B07P7399A	B07P7400A	B07P7401A	B07T7606A	B07T7607A	B07T7608A	B07T7609A

APPENDIX B

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INSTRUMENT CONDITION												GAGE LOST AT VAB, WAIVED							BAD, NOISY										
COMMENTS	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	FIXED HOUSING	FIXED HOUSING	FIXED HOUSING	FIXED HOUSING	NOSE ASSY	NOSE ASSY	EXIT CONE	THROAT ASSY	THROAT ASSY	EXIT CONE	EXIT CONE	EXIT CONE	EXIT CONE	IGNITER	IGNITER	IGNITER	BEIGNITER		FWD DOME	FWD DOME	FWD DOME	USBI INSTALLED	USBI INSTALLED	USBI INSTALLED	FWD CTR SEG	FWD CTR SEG
KSC	×	×	×																	TER CHAM									
MEAS	TEMP. SRM		TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	TEMP. SRM	OPT	OPT	OPT	psiaPRESSURE, IGNITER CHAMBEIGNITER		VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRB	VIB. SRB	VIB. SRB		VIB. SRM
RANGE	0-400 dea	0-400 deg	0-400 deg	0-400 deg	0-400 deg	0-400 deg	0-400 deg	0-400 deg	-50 T0 750	-50 T0 750	-50 T0 750	-50 T0 750	-50 T0 750	-50 T0 750	-50 TO 750	-50 T0 750	0-1000 psia	0-1000 psia	0-1000 psia	0-3000 psiaPl		+/-400 g's	+/-400 g's	+/-400 g's	+/- 10 g's	10	10	12	+/- 10 g's
MEAS	11 11 11 11 11 11																				×	AXIAL	RADIAL	TANG	AXIAL	TANG.	TANG.	AXIAL	TANG.
STA	1486.30	1486.30	1486.30	1876.60	1876.60	1876.60	1876.60	1828.10	1828.10	1905.00	1845.00	1845.00	1905.00	1996.50	1996.50	1996.50	487.00	487.00	487.00	487.00	RIGHT RSRM	487.00	487.00	487.00	500.00	500.00	200.00	1159.50	1159.50
ANG LOC	0.0	120.0	240.0	0.0	90.0	180.0	270.0	0.0	180.0	0.0	90.0	270.0	180.0	0.0	120.0	240.0	40.0	180.0	270.0	115.0		180.0	180.0	180.0	0.0	0.0	180.0	0.0	0.0
INST.NO	B07T7610A	B07T7611A	B07T7612A	B07T7613A	B07T7614A	B07T7615A	B0717616A	B07T7617A	B07T7618A	B07T7619A	B07T7620A	B07T7621A	B07T7622A	B07T7623A	B07T7624A	B07T7625A	B47P1300A	B47P1301A	B47P1302A	B47P7310A		B08D8151A	B0808152A	B0808153A	B0808160A	B0<08161A	B08D8163A	B08D8164A	BU8U8165A

	# 	
INSTRUMENT CONDITION	FWD CTR SEG AFT SEG AFT SEG AFT SEG AFT SEG EXIT CONE EXIT CONE EXIT CONE EXIT CONE EXIT CONE AFT CONE AFT CTR SEG AFT CTR SEG AFT CTR SEG	GAGE LOST AT VAB, WAIVED
COMMENTS	FWD CTR SEG AFT SEG AFT SEG AFT SEG EXIT CONE EXIT CONE EXIT CONE EXIT CONE AFT CTR SEG AFT CTR SEG AFT CTR SEG	FWD SEG FWD SEG FWD SEG FWD SEG FWD SEG FWD SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG
KSC		E, BIAX E, BIAX E, BIAX E, BIAX E, BIAX E, BIAX E, BIAX
MEAS	VIB. SRM VIB. SRM	STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, MEMBRANE, BIAX STRAIN, BIAX
RANGE	+/- 10 g's VIB. SRW +/- 10 g's VIB. SRW	+/-2K -2K/+6K +/-2K -2K/+6K +/-2K +/2K +/2K +/2K +/2K +/2K +/2K +/2K +/2K +/2K +/2K +/
	RADIAL AXIAL TANG. RADIAL AXIAL TANG. AXIAL TANG. AXIAL TANG.	AXIAL TANG. AXIAL TANG. AXIAL TANG. AXIAL TANG. AXIAL TANG. AXIAL TANG. AXIAL TANG.
STA	1159.50 1829.50 1829.50 1829.50 1914.00 1914.00 1914.00 839.50 839.50 1479.50	670.00 670.00 670.00 670.00 670.00 670.00 670.00 1330.00 1330.00 1330.00 1330.00 1330.00
ANG	0.0 0.0 180.0 85.0 85.0 270.0 0.0 0.0	0.0 85.0 85.0 180.0 180.0 270.0 270.0 270.0 270.0 270.0 85.0
INST.NO	BOBDB166A BOBDB167A BOBDB168A BOBDB170A BOBDB172A BOBDB173A BOBDB173A BOBDB176A BOBDB176A BOBDB177A BOBDB177A BOBDB177A BOBDB177A	B08G8251A B08G8253A B08G8253A B08G8255A B08G8255A B08G8256A B08G8258A B08G8258A B08G826A B08G826A B08G826A B08G826A B08G826A B08G826A B08G826A B08G826A B08G826A B08G826A

MATTINAA TUSHIATANI	INSTRUMENT CONDITION	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	GAGE LOST AT VAB, WAIVED	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	GAGE LOST AT VAB, WAIVED	SPIKE AT .21 SEC.	SPIKE AT .21 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	GAGE LOST AT VAB, WAIVED	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	SPIKE AT .25 SEC.	SPIKE AT .25 SEC.	SPIKE AT .30 SEC.		GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	LOST AT 300 SEC.	BAD, NOISY	LOST AT 300 SEC.	LOST AT 300 SEC.	LOST AT 300 SEC.		LOST AT 300 SEC.	LOST AT 300 SEC.
STREET	ij	FWD SEG	FWD SEG	FWD CTR SEG	FVD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING
KSC	CE	×	×	×	×					×	×	×	×					×	×	×	×				×	×								
MEAS	MANUC IIPC	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH
DANG	77440E	+6K, -2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K
MEAS																																		
STA	**************************************	846.78	848.53	850.17	852.58	855.03	857.28	931.48	1091.48	1166.78	1168.53	1170.17	1172.58	1175.03	1177.28	1251.48	1411.48	1486.78	1488.53	1490.17	1492.58	1495.03	1497.28	1637.48	1834.75	1836.20	1859.19	1861.00	1875.65	1872.45	1872.95	1874.85	1875.65	1876.25
ANG		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ON. TSNI		B08G8273A	B08G8274A	B08G8275A	B08G8276A	B08G8277A	B08G8278A	B08G8279A	B0868282A	B0868283A	B08G8284A	B08G8285A	B08G8286A	B08G8287A	B08G8288A	B08G8289A	B08G8292A	B08G8293A	B08G8294A	B08G8295A	B08G8296A	B08G8297A	B08G8298A	B08G8301A	B08G8305A	B08G8306A	B08G8307A	B08G8308A	B08G8310A	B08G8311A	B08G8312A	B08G8313A	B08G8314A	B08G8315A

FLIGHT 3 DEVELOPMENT FLIGHT INSTRUMENTATION (DFI)

INSTRUMENT CONDITION																																
COMMENTS		FWD DOME			FWD SEG		FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	CTR	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	CTR	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG
KSC																																
MEAS TYPE	RIAX			i, BIAX	N, BIAX		STRAIN, BIAX	AIN, BIAX	IIN, BIAX	IIN, BIAX	IN, BIAX	IN, BIAX	IN, BIAX		N, BIAX	IN, BIAX	IN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX			STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	STRAIN	STRAIN.	STRAIN,	STRAIN	STRAIN,	STRAIN,	STR	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STR	S	ST	STR	STR	SI	STR	STR	STR	STRA	STR	STR	STR	STR	STR
u.	 			+6K,-2K STRAIN	+/-2K STRAI	+6K, -2K STRA	+/-2K STR	+6K,-2K STR	+/-2K STR/	+6K, -2K STRA	+/-2K STRA	+6K,-2K STRA	+/-2K STRA		+/-2K STRAI	+6K, -2K STRA		+6K, -2K STF	+/-2K ST	+6K,-2K ST		_		+6K, -2K STR	+/-2K STR	+6K, -2K STR	+/-2K STRA	+6K, -2K STRA	+/-2K STR	+6K,-2K STR	+/-2K STR	+6K, -2K STR
RANGE	+/-7K	+6K2K	+/-2K			+6K, -2K		+6K, -2K			+/-2K		+/-2K	+6K, -2K	+/-2K	+6K, -2K	. +/-2K		+/-2K	+6K, -2K	. +/-2K	+6K, -2K	. +/-2K	+6K, -2K	- +/-2K	+6K, -2K				+6K, -2K	- +/-2K	
MEAS DIR RANGE	40 AXIAI +/-2K	TANG. +6K2K	+/-2K	+6K,-2K	. +/-2K	8 TANG. +6K,-2K	+/-2K	8 TANG. +6K,-2K	+/-2K	+6K, -2K	8 AXIAL +/-2K	8 TANG. +6K,-2K	8 AXIAL +/-2K	8 TANG. +6K,-2K	8 AXIAL +/-2K	8 TANG. +6K,-2K	8 AXIAL +/-2K	8 TANG. +6K,-2K	8 AXIAL +/-2K	8 TANG. +6K,-2K	0 AXIAL +/-2K	. +6K, -2K	+/-2K	+6K, -2K	0 AXIAL +/-2K	. +6K, -2K						
MEAS STA DIR RANGE	AXIAL +/-2K	TANG. +6K2K	AXIAL +/-2K	556.48 TANG. +6K,-2K	556.48 AXIAL +/-2K	556.48 TANG. +6K,-2K	556.48 AXIAL +/-2K	556.48 TANG. +6K,-2K	556.48 AXIAL +/-2K	8 TANG. +6K,-2K	876.48 AXIAL +/-2K	876.48 TANG. +6K,-2K	1196.48 AXIAL +/-2K	1196.48 TANG. +6K,-2K	0 AXIAL +/-2K	0 TANG. +6K,-2K	1466.00 AXIAL +/-2K	1466.00 TANG. +6K,-2K	1466.00 AXIAL +/-2K	0 TANG. +6K,-2K												

		AFT CTR SEG																																
	COMMENTS	AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG
KSC	INST																																	
MEAS	TYPE	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	RANGE	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K												
MEAS	DIR	AXIAL	TANG.	AXIAL	TAMG.	AXIAL	TANG.	AXIAL																										
	STA	1466.00	1466.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00
ANG	707	270.0	270.0	0.0	0.0	82.0	82.0	180.0	180.0	220.0	220.0	240.0	240.0	255.0	255.0	270.0	270.0	285.0	285.0	320.0	320.0	0.0	0.0	82.0	82.0	180.0	180.0	220.0	220.0	240.0	240.0	255.0	255.0	270.0
	INST.NO	B08G8348A	B08G8349A	B08G8368A	B08G8369A	B08G8370A	B08G8371A	B08G8372A	B08G8373A	B08G8374A	B08G8375A	B08G8376A	B08G8377A	B08G8378A	B08G8379A	B08G8380A	B08G8381A	B08G8382A	B08G8383A	B08G8384A	B08G8385A	B08G8386A	B08G8387A	B08G8388A	B08G8389A	B08G8390A	808G8391A	B08G8392A	B08G8393A	B08G8394A	B08G8395A	B08G8396A	B08G8397A	B08G8398A

APPENDIX B

		PED	
INSTRUMENT CONDITION		SWITCHED WITH BO8G8463A, DATA LOST CLIPPED SWITCHED WITH BO8G8462A	BAD, DATA DROPOUT
COMMENTS	FWD EXIT CONE FWD EXIT CONE THROAT ASSY THROAT ASSY EXIT CONE EXIT CONE	AFT SEG AFT SEG AFT SEG AFT SEG AFT SEG AFT SEG AFT SEG	FWD DOME FWD SEG FWD SEG FWD SEG FWD SEG AFT CTR SEG AFT CTR SEG AFT CTR SEG FIXED HOUSING FIXED HOU
KSC			****
MEAS	STRAIN, BIAX STRAIN, BIAX STRAIN, BIAX STRAIN, BIAX STRAIN, BIAX STRAIN, BIAX		TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM TEMP, SRM
RANGE	+/-2K STRAIN, B +6K,-2K STRAIN, B +/-2K STRAIN, B +6K,-2K STRAIN, B +/-2K STRAIN, B +/-2K STRAIN, B	+6K, -2K +/-2K +6K, -2K +/-2K +6K, -2K +/-2K +/-2K	0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-400 deg 0-50 to 750 -50 to 750 -50 to 750 -50 to 750 -50 to 750 -50 to 750
MEAS	AXIAL TANG. AXIAL TANG. AXIAL TANG.	TANG. AXIAL TANG. AXIAL TANG. AXIAL TANG.	
STA		1511.00 1511.00 1511.00 1511.00 1511.00 1511.00	486.40 846.30 846.30 1486.30 1486.30 1486.30 1876.60 1876.60 1876.60 1876.00 1828.10 1828.10 1828.10 1828.00 1845.00 1845.00
ANG	0.06 0.09 0.09 0.09 0.09	320.0 285.0 285.0 255.0 255.0 220.0	205.0 180.0 60.0 300.0 180.0 60.0 90.0 270.0 180.0 90.0 270.0
INST.NO	B08G8448A B08G8449A B08G8450A B08G8451A B08G8451A B08G8452A B08G8453A	B0868461A B0868462A B0868463A B0868464A B0868465A B0868466A	80778606A 80778607A 80778609A 80778610A 80778612A 80778613A 80778613A 80778613A 80778613A 80778619A 80778619A 80778619A 80778620A 80778620A

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:	NC						
	INSTRUMENT CONDITION				BAD, NOISY		
	KANGE ITPE INSI COMMENIS	EXIT CONE	EXIT CONE	IGNITER	IGNITER	IGNITER	BEIGNITER
KSC	- SN T						ITER CHAM
MEAS	TPE ====================================	TEMP. SRM	TEMP. SRM	0PT	OPT	DPT	RESSURE, IGN
	KANGE	-50 to 750	-50 to 750	0-1000 psia	0-1000 psia	0-1000 psia	0-3000 psiaPRESSURE, IGNITER CHAMBEIGNITER
MEAS	UIK :======						
į	51A ========	60.0 1996.50	1996.50	487.00	487.00	487.00	487.00
ANG		0.09	300.0	40.0	180.0	270.0	115.0
FORE	INST.NO COC SIA DIR	B07T8624A	B07T8625A	B47P2300A	B47P2301A	B47P2302A	B47P8310A

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INSTRUMENT CONDITION																						LOST AT 270 SEC.	SWITCHED WITH BO8G7262A, DATA LOST CLIPPED	SWITCHED WITH BO8G7261A			LOST AT 340 SEC.		SPIKE AT 320 AND 390 SEC.
COMMENTS			USBI INSTALLED	USBI INSTALLED	USBI INSTALLED	FWD CTR SEG	FWO CTR SEG	FWD CTR SEG	AFT SEG	AFT SEG	AFT SEG	EXIT CONE	EXIT CONE	EXIT CONE	EXIT CONE	FWD SEG	FWD SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	FWD SEG
KSC																													
MEAS			VIB. SRB	VIB. SRB	VIB. SRB	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	VIB. SRM	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, GIRTH
RANGE			+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/- 10 g's	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+6K, -2K
		_	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	AXIAL	TANG.	RADIAL	TANG.	AXIAL	TANG.	AXIAL	TANG	TANG	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	HOOP
STA		LEFT RSRM	500.00	500.00	500.00	1159.50	1159.50	1159.50	1829.50	1829.50	1829.50	1914.00	1914.00	1914.00	1914.00	839.50	839.50	1479.50	1479.50	1479.50	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	1330.00	611.48
ANG LOC			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.0	85.0	85.0	270.0	0.0	0.0	0.0	0.0	180.0	0.0	0.0	270.0	270.0	180.0	180.0	95.0	95.0	N/A
INST.NO			B0807160A	B08D7161A	B08D7162A	B0807164A	B08D7165A	B08D7166A	B08D7167A	B08D7168A	B08D7169A	B08D7171A	B08D7172A	B08D7173A	B08D7174A	B08D7175A	B0807176A	B08D7177A	B08D7178A	B08D7179A	B08G7259A	B08G7260A	B08G7261A	B08G7262A	B08G7263A	B08G7264A	B08G7265A	B08G7266A	B08G7269A

APPENDIX B

		11																																
	INSTRUMENT CONDITION	DATA SPIKE AT .20 AND .26 SFC			GAGE LOST AT 370 SEC.			GAGE LOST AT VAB. WAIVED	SPIKE AT 320 AND 370 SFC.			GAGE LOST AT VAB. WAIVED		SPIKE AT 320 AND 340 SEC.	GAGE LOST AT VAB. WAIVED	GAGE LOST AT VAB. WAIVED		GAGE LOST AT VAB, WAIVED	SPIKE AT 370 SEC.	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED		SPIKE AT 370 SEC.				SPIKE AT .13 SEC., LOST AT 300 SEC.	LOST AT 300 SEC.		BAD, NOISY	BAD. NOISY	LOST AT 300 SEC.	LOST AT 300 SEC.
	COMMENTS	FWD SEG	FWD SEG	FWD SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	FIXED HOUSING	AFT DOME	AFT DOME
KSC	INST	ii 11 11 11 11 11	×	×	×	×					×	×	×	×					×	×	×	×				×	×							
MEAS	TYPE	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH
	RANGE TYPE	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K, -2K	+6K,-2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K, -2K	+6K,-2K	+6K,-2K	+6K,-2K	+6K, -2K
MEAS	DIR	400 1	H00P	HOOP	HOOH	HOOP	H00P	H00H	H00P	H00P	H00H	H00H	H00P	H00P	HOOH	H00H	HOOP	HOOP	HOOH	HOOH	H00P	H00P	H00P	HOOP	HOOP	HOOP	H00P	HOOP	HOOP	H00P	H00P	H00P	H00P	H00H
	STA	771.48	846.78	848.53	850.17	852.58	855.03	857.28	931.48	1091.48	1166.78	1168.53	1170.17	1172.58	1175.03	1177.28	1251.48	1411.48	1486.78	1488.53	1490.17	1492.58	1495.03	1497.28	1637.48	1834.75	1836.20	1859.19	1861.00	1875.65	1872.45	1872.95	1874.85	1875.65
ANG	207	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/A	N/A	N/A	N/A	N/A
	INST.NO	B08G7272A	B08G7273A	B08G7274A	B08G7275A	B08G7276A	B08G7277A	B08G7278A	B08G7279A	B08G7282A	B08G7283A	B08G7284A	B08G7285A	B08G7286A	B08G7287A	B0867288A	B08G7289A	B08G7292A	B08G7293A	B08G7294A	B08G7295A	B08G7296A	B08G7297A	B08G7298A	B08G7301A	B08G7305A	B08G7306A	B08G7307A	B08G7308A	B08G7310A	B08G7311A	B08G7312A	B08G7313A	B08G7314A

APPENDIX B

	II II II																															
	LOST AT 300 SEC.					SPIKE AT 320 AND 370 SEC.															BAD, NOISY					LOST AT 250 SEC.	LOST AT 250 SEC.					
COMMENTS	FIXED HOUSING	FWD DOME	FWD DOME	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWO CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG
	H 																															
MEAS TYPE	+6K,-2K STRAIN, GIRTH	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
RANGE	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K						
MEAS DIR	1	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL
STA	1876.25	486.40	486.40	556.48	556.48	556.48	556.48	556.48	556.48	556.48	556.48	876.48	876.48	876.48	876.48	876.48	876.48	876.48	876.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1196.48	1466.00	1466.00	1466.00	1466.00	1466.00
ANG LOC	N/A	5.0	5.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0 ე	0	98.0	180.0
INST.NO	B08G7315A	B08G7316A	B08G7317A	B08G7318A	B08G7319A	B0867320A	B08G7321A	B08G7322A	B08G7323A	B08G7324A	B0867325A	B08G7326A	B08G7327A	B08G7328A	B0867329A	B0867330A	B08G7331A	B08G7332A	B08G7333A	B0867334A	B08G7335A	B08G7336A	B08G7337A	B08G7338A	B08G7339A	B08G7340A	B08G7341A	B08G7342A	B08G7343A	B08G7344A	B08G7345A	B08G7346A

FLIGHT 3 DEVELOPMENT FLIGHT INSTRUMENTATION (DFI)

TWR-17542 VOL IX

	INSTRUMENT CONDITION	FT CTR SEG	GAGE LOST AT VAB. WATVFD	GAGE LOST AT VAB. WATVED							SWITCHED WITH BORG7375A	SWITCHED WITH BORG7374A																	SWITCHED WITH BO8G7393A	SWITCHED WITH BO8G7392A		LOST AT 340 SEC.	GAGE LOST AT VAB, WAIVED	
	COMMENTS	AFT CTR SEG		AFT CTR SEG			AFT SEG						AFT SEG	AFT SEG			AFT SEG		AFT SEG	AFT SEG			AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG						
KSC	INST	H 11 41 10 11 11 11 11																																
MEAS	TYPE	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX		STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	RANGE	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K
MEAS	DIR	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.
	STA		1466.00	1466.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1497.00	1501.00	1501.00	1501.00	•	1501.00	1501.00	•	1501.00	1501.00	1501.00		1501.00
ANG	307 TOC	180.0	270.0	270.0	180.0	180.0	98.0	98.0	0.0	0.0	320.0	320.0	300.0	300.0	285.0	285.0	270.0	270.0	255.0	255.0	220.0	220.0	180.0	180.0	98.0	98.0	0.0	0.0	320.0	320.0	300.0	300.0	285.0	285.0
	INST.NO	B08G7347A	B08G7348A	B0867349A	B08G7368A	B08G7369A	B08G7370A	B0867371A	B08G7372A	B08G7373A	B08G7374A	B08G7375A	B08G7376A	B08G7377A	B08G7378A	B08G7379A	B08G7380A	B0867381A	B0867382A	B08G7383A	B08G7384A	B08G7385A	B08G7386A	B08G7387A	B08G7388A	B08G7389A	B08G7390A	B08G7391A	B08G7392A	B08G7393A	B08G7394A	B08G7395A	B08G7396A	B08G7397A

APPENDIX B

	#																																	
	INSTRUMENT CONDITION			GAGE LOST AT VAB, WAIVED	SWITCHED WITH BOSG7400A				GAGE LOST AT VAB, WAIVED							LOST AT 320 SEC.	BAD, NOISY		LOST AT 320 SEC.						BAD, NOISY		LOST AT 320 SEC.				AT 320	AT 320	AT 320	LOST AT 320 SEC.
	COMMENTS	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FLEX BEARING	FLEX BEARING	NOSE ASSY
KSC	INST																																	
MEAS	TYPE	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	RANGE	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K,-2K	+6K,-2K	+/-2K	+/-2K	+6K,-2K	+/-2K
MEAS	DIR	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	AXIAL
	STA	1501.00	1501.00	1501.00	1501.00	1501.00	1501.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1797.00	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1871.80	1871.80	1874.18	1874.18	1849.00	1849.00	1829.20
ANG	707	270.0	270.0	255.0	255.0	220.0	220.0	0.0	0.0	98.0	98.0	180.0	180.0	270.0	270.0	0.0	0.0	0.0	0.0	90.0	90.0	90.0	90.0	180.0	180.0	180.0	180.0	270.0	270.0	270.0	270.0	90.0	90.0	90.0
	INST.NO	B08G7398A	B08G7399A	B08G7400A	B08G7401A	B08G7402A	B08G7403A	B08G7404A	B08G7405A	B08G7406A	B08G7407A	B08G7408A	B08G7409A	B08G7410A	B08G7411A	B08G7412A	B08G7413A	B08G7415A	B08G7416A	B08G7417A	B08G7418A	B08G7420A	B08G7421A	B08G7422A	B08G7423A	B08G7425A	B08G7426A	B08G7427A	B08G7428A	B08G7430A	B08G7431A	B08G7432A	B08G7433A	B08G7434A

NOTITIONOS TRABILIDADES	11				GAGE LOST AT VAB, WAIVED				GAGE LOST IN FLIGHT	GAGE LOST IN FLIGHT			GAGE LOST AT VAB, WAIVED			GAGE LOST IN FLIGHT										GAGE LOST IN FLIGHT						
COMMENTS	COMPEN : 3	NOSE ASSY	FWD EXIT CONE	FWD EXIT CONE	THROAT ASSY	THROAT ASSY	EXIT CONE	EXIT CONE	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FWD SEG			FWD SEG	FWD SEG	FWD SEG	FWD DOME	FWD SEG	FWD SEG							
KSC	- CF1																													×	×	×
MEAS	JII	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	PRESS, SRM		PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	PRESS, SRM	TEMP, SRM	TEMP. SRM	TEMP. SRM	
RANGE		+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K		+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	+/-2K	+6K,-2K	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-10 psia	0-400 deg	0-400 deg	0-400 deg	0-400 dea
MEAS		TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.																
STA		1829.20	1865.00	1865.00	1834.00	1834.00	1908.00	1908.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	1511.00	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	763.50	486.40	846.30	846.30	846.30
ANG LOC		90.0	90.0	90.0	0.06	90.0	0.06	0.06	220.0	220.0	255.0	255.0	285.0	285.0	320.0	320.0	349.0	319.0	289.0	259.0	229.0	199.0	169.0	139.0	109.0	79.0	49.0	19.0	205.0	0.0	120.0	240.0
INST.NO		B0867435A	B08G7448A	B0867449A	B08G7450A	B08G7451A	B08G7452A	B08G7453A	B08G7460A	B08G7461A	B08G7462A	B08G7463A	B08G7464A	B08G7465A	B08G7466A	B08G7467A	B07P7390A	B07P7391A	B07P7392A	B07P7393A	B07P7394A	B07P7395A	B07P7396A	B07P7397A	B07P7398A	B07P7399A	B07P7400A	B07P7401A	B07T7606A	B07T7607A	B07T7608A	B07T7609A

APPENDIX B

APPENDIX B

FLIGHT 3 DEVELOPMENT FLIGHT INSTRUMENTATION (DFI)

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	INSTRUMENT CONDITION	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	_	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	.25	.25	GAGE LOST AT VAB, WAIVED	SPIKE AT .21 SEC.	SPIKE AT .21 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	GAGE LOST AT VAB, WAIVED	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	STRAIN LAGS PRESSURE CURVE BY .25 SEC.	SPIKE AT .25 SEC.	SPIKE AT .25 SEC.	SPIKE AT .30 SEC.		GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	SPIKE AT .30 SEC.	GAGE LOST AT VAB, WAIVED	GAGE LOST AT VAB, WAIVED	LOST AT 300 SEC.	BAD, NOISY	LOST AT 300 SEC.	LOST AT 300 SEC.	LOST AT 300 SEC.		LOST AT 300 SEC.	020 000 TA T301
	IIS	FWD SEG	FWD SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FWD CTR SEG	FVD CTR SEG	FWD CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	FIXED HOUSING	AFT DOME	AFT DOME	ETYED HOUSTNE
KSC	INST	*** ×	×	×	×					×	×	×	×					×	×	×	×				×	×								
S		GIRTH	GIRTH	GIRTH	GIRTH	GIRTH	GIRTH	GIRTH	GIRTH	E	Ŧ	Ξ	Ξ	Ŧ	Ξ	Ξ	H	GIRTH	Ξ	H	H	TH	Ξ	Ξ	Ξ	Ξ	Ξ	표	Ξ	프	프	H	Ŧ	Ξ
MEAS	TYPE	STRAIN, GI		STRAIN, GI	STRAIN, GII	STRAIN, GII	STRAIN, GIF	STRAIN, GI	STRAIN, GII	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIF	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	STRAIN, GIRTH	
MEA	RANGE TYPE																																	STRAIN
MEAS		+6K,-2K STRAIN, GI	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	+6K, -2K STRAIN, GIRTH
	RANGE	846.78 +6K,-2K STRAIN, G	STRAIN,	STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K,-2K STRAIN,	STRAIN,	+6K,-2K STRAIN,	STRAIN,	STRAIN,	STRAIN,	+6K,-2K STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN
	RANGE	3 +6K,-2K	848.53 +6K,-2K STRAIN,	850.17 +6K,-2K STRAIN,	852.58 +6K,-2K STRAIN,	855.03 +6K,-2K STRAIN,	857.28 +6K,-2K STRAIN,	931.48 +6K,-2K STRAIN,	1091.48 +6K,-2K STRAIN,	1166.78 +6K,-2K STRAIN,	1168.53 +6K,-2K STRAIN,	1170.17 +6K,-2K STRAIN,	1172.58 +6K,-2K STRAIN,	1175.03 +6K,-2K STRAIN,	1177.28 +6K,-2K STRAIN,	1251.48 +6K,-2K STRAIN,	1411.48 +6K,-2K STRAIN,	1486.78 +6K,-2K STRAIN,	+6K,-2K STRAIN,	1490.17 +6K,-2K STRAIN,	1492.58 +6K,-2K STRAIN,	1495.03 +6K,-2K STRAIN,	1497.28 +6K,-2K STRAIN,	1637.48 +6K,-2K STRAIN,	1834.75 +6K,-2K STRAIN,	1836.20 +6K,-2K STRAIN,	1859.19 +6K,-2K STRAIN,	1861.00 +6K,-2K STRAIN,	1875.65 +6K,-2K STRAIN,	1872.45 +6K,-2K STRAIN,	1872.95 +6K,-2K STRAIN,	1874.85 +6K,-2K STRAIN,	+6K,-2K STRAIN,	+6K -2K STRAIN

APPENDIX B

	2		MEAS		ACA 3)		
INST.NO	ЭО Т	STA	DIR	RANGE	TYPE		INST	COMMENTS	INSTRUMENT CONDITION
B08G8316A	185.0	486.40	AXIAL	+/-2K	STRAIN,	BIAX		FWD DOME	
B08G8317A	185.0	486.40	TANG.	+6K,-2K	STRAIN,	BIAX		FWD DOME	
B08G8318A	180.0	556.48	AXIAL	+/-2K	STRAIN,	BIAX		FWD SEG	
B08G8319A	180.0	556.48	TANG.	+6K,-2K	STRAIN,	BIAX		FWD SEG	
B08G8320A	82.0	556.48	AXIAL	+/-2K	STRAIN,	BIAX			
B08G8321A	82.0	556.48	TANG.	+6K,-2K	STRAIN,	BIAX			
B08G8322A	0.0	556.48	AXIAL	+/-2K		BIAX			
B08G8323A	0.0	556.48	TANG.	+6K,-2K		BIAX		FWD SEG	
B08G8324A	270.0	556.48	AXIAL	+/-2K		BIAX			
B08G8325A	270.0	556.48	TANG.	+6K,-2K		BIAX		FWD SEG	
B08G8326A	180.0	876.48	AXIAL	+/-2K		BIAX		FWD CTR SEG	
B08G8327A	180.0	876.48	TANG.	+6K,-2K		BIAX		FWD CTR SEG	
B08G8328A	82.0	876.48	AXIAL	+/-2K		BIAX		CTR	
B08G8329A	82.0	876.48	TANG.	+6K,-2K		BIAX		FWD CTR SEG	
808G8330A	0.0	876.48	AXIAL	+/-2K		BIAX		FWD CTR SEG	
B08G8331A	0.0	876.48	TANG.	+6K,-2K	STRAIN,	BIAX		FWD CTR SEG	
B08G8332A	270.0	876.48	AXIAL	+/-2K	STRAIN,	BIAX		FWD CTR SEG	
808G8333A	270.0	876.48	TANG.	+6K,-2K	STRAIN,	BIAX		FWD CTR SEG	
B08G8334A	180.0	1196.48	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8335A	180.0	1196.48	TANG.	+6K,-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8336A	82.0	1196.48	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8337A	82.0	1196.48	TANG.	+6K,-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8338A	0.0	1196.48	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8339A	0.0	1196.48	TANG.	+6K,-2K		BIAX		AFT CTR SEG	
B08G8340A	270.0	1196.48	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8341A	270.0	1196.48	TANG.	+6K,-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8342A	180.0	1466.00	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8343A	180.0	1466.00	TANG.	+6K,-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8344A	82.0	1466.00	AXIAL	+/-2K	STRAIN,	BIAX		AFT CTR SEG	
808G8345A	82.0	1466.00	TANG.	+6K,-2K	STRAIN,	BIAX		AFT CTR SEG	
B08G8346A	0.0	1466.00	AXIAL	+/-2K		BIAX		AFT CTR SEG	
308683474	•								

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	INSTRUMENT CONDITION																																	
		AFT CTR SEG	AFT CTR SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG
KSC	INST	;;)) †())))																																
S		BIAX	BIAX	BIAX	¥	BIAX	BIAX	BIAX	BIAX	BIAX	BIAX	¥	BIAX	BIAX	¥	¥	BIAX	¥	⋨	¥	BIAX	BIAX	¥	×	¥	¥	⋨	⋨	×	×	×	⋨	×	×
MEAS	TYPE	STRAIN, B.		STRAIN, BI	STRAIN, BIAX	STRAIN, BI	STRAIN, B	STRAIN, B	STRAIN, B.	STRAIN, BI	STRAIN, BI	STRAIN, BIAX	STRAIN, BI	STRAIN, BI	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BI	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BI	STRAIN, BI	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
MEA	RANGE TYPE							STRAIN,										_				STRAIN,				_		_		STRAIN,				
MEAS		STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	+/-2K STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,
		0 AXIAL +/-2K STRAIN,	+6K,-2K STRAIN,	+/-2K STRAIN,	+6K,-2K STRAIN,	. +/-2K STRAIN,	+6K,-2K STRAIN,	+/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	. +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	+/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	+6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	+6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	+6K,-2K STRAIN,	+/-2K STRAIN,	+6K,-2K STRAIN,	. +/-2K STRAIN,
	DIR) AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	1497.00 TANG. +6K,-2K STRAIN,	1497.00 AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	1501.00 AXIAL +/-2K STRAIN,	1501.00 TANG. +6K,-2K STRAIN,	1501.00 AXIAL +/-2K STRAIN,	1501.00 TANG. +6K,-2K STRAIN,	1501.00 AXIAL +/-2K STRAIN,	1501.00 TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	1501.00 AXIAL +/-2K STRAIN,	1501.00 TANG. +6K,-2K STRAIN,	1501.00 AXIAL +/-2K STRAIN,	TANG. +6K,-2K STRAIN,	AXIAL +/-2K STRAIN,

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	INSTRUMENT CONDITION	AFT SEG																				BAD, NOISY								LOST AT 310 SEC.				
	COMMENTS	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FIXED HOUSING	FIXED HOUSING	AFT DOME	AFT DOME	FLEX BEARING	FLEX BEARING	NOSE ASSY	NOSE ASSY
KSC	INST	11 14 13 14 10 10 11																																
MEAS	TYPE	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX	STRAIN, BIAX
	RANGE	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+/-2K	+6K,-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K	+6K, -2K	ξ.	+/-2K	+6K, -2K	•6К, -2К	+/-2K	+/-2K	+6K,-2K	+6K, -2K	+/-2K	+/-2K	-6К, -2К	+6К, -2К	+/-2K	+/-2K	+6K, -2K	+/-2K	+6K, -2K
	i	11		¥	+	9	+	4	+	9	Ŧ	ξ	7	¥	7	ξ	φ	+/-2K	`	¥	4	+	+	9	\$	+	Ŧ	\$	*	+	Ŧ	4	+	9
MEAS	DIR	TANG.	AXIAL	TANG. +6		•	AXIAL +	TANG. +6	AXIAL +	TANG. +6	AXIAL +/	TANG. +6K	AXIAL +/	TANG. +6K	AXIAL +/		TANG. +6K,				TANG. +6K							TANG. +6	•		AXIAL +/	TANG. +6k	AXIAL +,	TANG. +61
	STA DIR	1501.00 TANG.		·	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	AXIAL	TANG.	•	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL	AXIAL	TANG.	TANG.	AXIAL		•	AXIAL	•
		270.0 1501.00	AXIAL	TANG.	1501.00 AXIAL	1501.00 TANG.	AXIAL	1797.00 TANG.	1797.00 AXIAL	TANG.	AXIAL	TANG.	1797.00 AXIAL	TANG.	1871.80 AXIAL	1871.80 TANG.	1874.18 TANG.	1874.18 AXIAL	1871.80 AXIAL	1871.80 TANG.	1874.18 TANG.	1874.18 AXIAL	1871.80 AXIAL	1871.80 TANG.	1874.18 TANG.	1874.18 AXIAL	1871.00 AXIAL	1871.00 TANG.	1874.18 TANG.	1874.18 AXIAL	AXIAL	TANG.	1829.20 AXIAL	TANG.

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INSTRUMENT CONDITION	FUD EXIT CONF								SWITCHED WITH B08G8463A, DATA LOST CLIPPED	SWITCHED WITH BO8G8462A						BAD, DATA DROPOUT															
COMMENTS	FWD EXIT CONF	FWD EXIT CONE	THROAT ASSY	THROAT ASSY	EXIT CONE	EXIT CONE	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	AFT SEG	FWD DOME	FWD SEG	FWD SEG	FWD SEG	AFT CTR SEG	AFT CTR SEG	AFT CTR SEG	FIXED HOUSING	FIXED HOUSING	FIXED HOUSING	NOSE ASSY	NOSE ASSY	EXIT CONE	THROAT ASSY	THROAT ASSY	EXIT CONE	EXIT CONE
KSC																×	×	×	×	×	×										
MEAS TYPE	BIAX	BIAX	BIAX	BIAX	, BIAX	I, BIAX	N, BIAX	N, BIAX	N, BIAX	N, BIAX	N, BIAX	N, BIAX	IN, BIAX	IN, BIAX	TEMP, SRM	TEMP. SRM	EMP. SRM	EMP. SRM			TEMP. SRM			EMP. SRM	EMP. SRM	EMP. SRM	SRM	P. SRM	EMP. SRM	P. SRM	TEMP. SRM
	STRAIN,			STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	STRAIN,	Ē	₽	H	-	_ '			=	=	Ħ	Ή	Ē	TEMP.	TEMP.	TEM	TEMP.	Ħ
M. RANGE T			STRAIN,	+6K, -2K STRAIN,	+/-2K STRAIN	+6K, -2K STRAIN	+/-2K STRAI	+6K, -2K STRAI	+/-2K STRAII	+6K,-2K STRAI			+/-2K STRA	+6K,-2K STRA	0-400 deg TE	0-400 deg TEM	deg 1	deg]		0-400 deg	0-400 deg T	deg 1	_	0-400 deg TF	0-400 deg TE	-50 to 750 TEM	-50 to 750 TEMF	-50 to 750 TEM	-50 to 750 TEM	-50 to 750 TEM	-50 to 750 TE
	AXIAL +/-2K STRAIN.	STRAIN,	STRAIN,					+6K, -2K	+/-2K		+/-2K	+6K, -2K				Ged	deg 1	deg		0-400 deg	deg Jest	deg .	, ge	deg	deg 1	750	750 1	750	750 1	750 1	750
RANGE		+6K, -2K STRAIN,	+/-2K STRAIN,	TANG. +6K, -2K	AXIAL +/-2K	TANG. +6K, -2K	AXIAL +/-2K	TANG. +6K, -2K	AXIAL +/-2K	TANG. +6K, -2K	AXIAL +/-2K	TANG. +6K,-2K	+/-2K	+6K,-2K		0-400 deg	0-400 deg 1	0-400 deg l	0-400	0-400	deg Jest	0-400 deg]	, ge	0-400 deg 1	deg 1	-50 to 750 l	-50 to 750 T	-50 to 750 l	750 1	-50 to 750 l	750
MEAS DIR RANGE	AXIAL	TANG. +6K, -2K STRAIN,	AXIAL +/-2K STRAIN,	1834.00 TANG. +6K,-2K	1908.00 AXIAL +/-2K	1908.00 TANG. +6K,-2K	1511.00 AXIAL +/-2K	1511.00 TANG. +6K,-2K	1511.00 AXIAL +/-2K	1511.00 TANG. +6K,-2K	1511.00 AXIAL +/-2K	1511.00 TANG. +6K,-2K	AXIAL +/-2K	TANG. +6K, -2K	486.40 0-400 deg	846.30 0-400 deg	846.30 0-400 deg 1	846.30 0-400 deg 1	1486.30 0-400	0-400	1485.30 0-400 deg 1 1876.60 0-400 deg 1	1876.60 0-400 deg	0-400 deg	0-400 deg 1	1828.10 0-400 deg 1	1828.10 -50 to 750 T	1905.0050 to 750 T	1845.00 -50 to 750 l	-50 to 750 T	1905.00 -50 to 750 T	-50 to 750

80
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8
AP

INSTRUMENT CONDITION	EXIT CONE	BAD, NOISY
COMMENTS	EXIT CONE	IGNITER IGNITER IGNITER SEIGNITER
KSC INST		TER CHAMB
MEAS	TEMP. SRM TEMP. SRM	0-1000 psia OPT IGNITER 0-1000 psia OPT IGNITER 0-1000 psia OPT IGNITER 0-3000 psiaPRESSURE, IGNITER CHAMBEIGNITER
ANG MEAS MEAS MEAS INST.NO LOC STA DIR RANGE TYPE	-50 to 750 -50 to 750	0-1000 psia 0-1000 psia 0-1000 psia 0-3000 psiaP
MEAS	 	
STA	1996.50 1996.50	487.00 487.00 487.00
ANG	300.0	40.0 180.0 270.0 115.0
INST.NO	B07T8625A 60.0 1996.50 B07T8625A 300.0 1996.50	B47P2300A B47P2301A B47P2302A B47P8310A

APPENDIX C GFI Instrumentation List

1EFT RSRM 534.5 +/-200 deg FWD SEG 694.5 +/-200 deg FWD/CTR SEG 931.48 +/-200 deg FWD/CTR SEG 931.48 +/-200 deg FWD/CTR SEG 1091.48 +/-200 deg FWD/CTR SEG 1091.48 +/-200 deg FWD/CTR SEG 1091.48 +/-200 deg FWD/CTR SEG 11411.48 +/-200 deg AFT/CTR SEG 1411.48 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1535 +/-200 deg AFT/SEG 1538 +/-200 deg AFT/SEG 1538 +/-200 deg AFT/SEG 1538 +/-200 deg AFT/SEG 1539 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG 1531 +/-200 deg AFT/SEG	INST. NO. ANG. LOC.	ANG. LOC.	STATION		COMMENTS	INSTRUMENTATION CONDITION
270 534.5 +/-200 deg FVD SEG 45 684.5 +/-200 deg FVD SEG 135 684.5 +/-200 deg FVD SEG 270 684.5 +/-200 deg FVD SEG 270 684.5 +/-200 deg FVD SEG 215 684.5 +/-200 deg FVD SEG 45 931.48 +/-200 deg FVD CTR SEG 270 931.48 +/-200 deg FVD/CTR SEG 270 1091.48 +/-200 deg FVD/CTR SEG 270 111.48 +/-200 deg AFI/CTR SEG 270 1411.48 +/-200 deg AFI/CTR SEG			LEFT RSRM			
45 694.5 +/-200 deg FWD SEG 325 694.5 +/-200 deg FWD SEG 270 694.5 +/-200 deg FWD SEG 271 694.5 +/-200 deg FWD SEG 272 694.5 +/-200 deg FWD SEG 273 694.5 +/-200 deg FWD SEG 45 931.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 271 1091.48 +/-200 deg FWD/CTR SEG 272 1091.48 +/-200 deg FWD/CTR SEG 273 1411.48 +/-200 deg FWD/CTR SEG	B06T7003A	270	534.5	+/-200 deg	FWD SEG	
135 694.5 +/-200 deg FWD SEG 270 694.5 +/-200 deg FWD SEG 270 694.5 +/-200 deg FWD SEG 215 694.5 +/-200 deg FWD SEG 45 931.48 +/-200 deg FWD CR FWD SEG 135 931.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 270 931.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 216 1091.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG FWD/CTR SEG 215 1411.48 +/-200 deg AFT/CTR SEG FWD/CTR SEG 220 1411.48 +/-200 deg	B06T7004A	45	694.5		FWD SEG	
325 694.5 +/-200 deg FWD SEG 270 694.5 +/-200 deg FWD SEG 215 694.5 +/-200 deg FWD SEG 45 931.48 +/-200 deg FWD SEG 135 931.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG <td>B06T7005A</td> <td>135</td> <td>694.5</td> <td></td> <td>FWD SEG</td> <td></td>	B06T7005A	135	694.5		FWD SEG	
270 694.5 +/-200 deg FWD SEG 215 694.5 +/-200 deg FWD SEG 90 778.98 +/-200 deg FWD/CTR SEG 135 931.48 +/-200 deg FWD/CTR SEG 220 931.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 210 1091.48 +/-200 deg FWD/CTR SEG 210 1091.48 +/-200 deg FWD/CTR SEG 210 1091.48 +/-200 deg AFT/CTR SEG 210 1411.48 +/-200 deg AFT/CTR SEG 215 1411.48 +/-200 deg AFT/CTR SEG 216 1411.48 +/-200 deg AFT/CTR SEG 217 1411.48 +/-200 deg AFT/CTR SEG 218 1411.48 +/-200 deg AFT/CTR SEG	B06T7006A	325	694.5		FWD SEG	
215 694.5 +/-200 deg FWD SEG 90 778.98 +/-200 deg FWD/CTR SEG 135 931.48 +/-200 deg FWD/CTR SEG 220 931.48 +/-200 deg FWD/CTR SEG 270 931.48 +/-200 deg FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 216 1091.48 +/-200 deg FWD/CTR SEG 217 1091.48 +/-200 deg AFT/CTR SEG 218 1411.48 +/-200 deg AFT/CTR SEG 219 1411.48 +/-200 deg AFT/CTR SEG 210 1411.48 +/-200 deg AFT/CTR SEG 210 1411.48 +/-200 deg AFT/CTR SEG 210 151 +/-200 deg AFT/SEG	B06T7007A	270	694.5			
90 778.98 +/-200 deg FND/CTR SEG 45 931.48 +/-200 deg FND/CTR SEG 325 931.48 +/-200 deg FND/CTR SEG 270 931.48 +/-200 deg FND/CTR SEG 215 931.48 +/-200 deg FND/CTR SEG 215 931.48 +/-200 deg FND/CTR SEG 325 1091.48 +/-200 deg FND/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg AFT SEG <td>B06T7008A</td> <td>215</td> <td>694.5</td> <td>+/-200 deg</td> <td>FWD SEG</td> <td></td>	B06T7008A	215	694.5	+/-200 deg	FWD SEG	
45 931.48 +/-200 deg FWD/CTR SEG 135 931.48 +/-200 deg FWD/CTR SEG 270 931.48 +/-200 deg FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG 45 1091.48 +/-200 deg FWD/CTR SEG 135 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT SEG 270 1511 +/-200 deg AFT SEG	B06T7009A	90	778.98	+/-200 deg	FWD SEG (TUNNEL)	
135 931.48 +/-200 deg FWD/CTR SEG 325 931.48 +/-200 deg FWD/CTR SEG 270 931.48 +/-200 deg FWD/CTR SEG 45 1091.48 +/-200 deg FWD/CTR SEG 135 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg AFT/CTR SEG 215 1411.48 +/-200 deg AFT/CTR SEG 220 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT SEG 270 1511 +/-200 deg AFT SEG 320 1511 +/-200 deg AFT SEG <tr< td=""><td>B0617010A</td><td>45</td><td>931.48</td><td>+/-200 deg</td><td>FWD/CTR SEG</td><td></td></tr<>	B0617010A	45	931.48	+/-200 deg	FWD/CTR SEG	
325 931.48 +/-200 deg FWD/CTR SEG 270 931.48 +/-200 deg FWD/CTR SEG 45 1091.48 +/-200 deg FWD/CTR SEG 135 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 216 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg AFT/CTR SEG 325 1411.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg FT RING 274 1511 +/-200 deg FT RING 45 1535 +/-200 deg AFT SEG 135 1535 +/-200 deg AFT SEG	B06T7011A	135	931.48	+/-200 deg	FWD/CTR SEG	
270 931.48 +/-200 deg FWD/CTR SEG 215 931.48 +/-200 deg FWD/CTR SEG 45 1091.48 +/-200 deg FWD/CTR SEG 325 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 30 1258.98 +/-200 deg AFT/CTR SEG 45 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT SEG 320 1511 +/-200 deg AFT SEG 45 1535 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 150	B06T7012A	325	931.48	+/-200 deg	FWD/CTR SEG	
215 931.48 +/-200 deg FWD/CTR SEG 45 1091.48 +/-200 deg FWD/CTR SEG 325 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 326 1411.48 +/-200 deg AFT/CTR SEG 45 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg AFT SEG 320 1511 +/-200 deg AFT SEG 45 1535 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG 4	B06T7013A	270	931.48	+/-200 deg	FWD/CTR SEG	
45 1091.48 +/-200 deg FWD/CTR SEG 135 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 90 1258.98 +/-200 deg FWD/CTR SEG 135 1411.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 270 1411.48 +/-200 deg AFT/CTR SEG 271 1411.48 +/-200 deg AFT/CTR SEG 272 1411.48 +/-200 deg AFT/CTR SEG 273 1411.48 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg FT RING 275 1511 +/-200 deg FT RING 370 1511 +/-200 deg AFT/CTR SEG 277 1511 +/-200 deg AFT/CTR SEG 278 1515 +/-200 deg AFT/CTR SEG 379 1511 +/-200 deg AFT/CTR SEG 370 1511 +/-200 deg AFT/CTR SEG 380 1501.86 +/-200 deg AFT SEG 390 1701.86 +/-200 deg AFT SEG 3101.01.86 +/-200 deg AFT SEG	B06T7014A	215	931.48	+/-200 deg	FWD/CTR SEG	
135 1091.48 +/-200 deg FWD/CTR SEG 325 1091.48 +/-200 deg FWD/CTR SEG 270 1091.48 +/-200 deg FWD/CTR SEG 215 1091.48 +/-200 deg FWD/CTR SEG 30 1258.98 +/-200 deg AFT/CTR SEG 135 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg ET RING 320 1511 +/-200 deg AFT SEG 45 1535 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 90 1701.86 +/-200 deg AFT SEG 150 +/-200 deg AFT SEG 150 +/-200 deg	B06T7015A	45	1091.48	+/-200 deg	FWD/CTR SEG	
325 1091.48 +/-200 deg FND/CTR SEG 270 1091.48 +/-200 deg FND/CTR SEG 215 1091.48 +/-200 deg FND/CTR SEG 90 1258.98 +/-200 deg AFT/CTR SEG (TUNNEL) 45 1411.48 +/-200 deg AFT/CTR SEG 270 1511 +/-200 deg AFT/CTR SEG 274 1511 +/-200 deg AFT/CTR SEG 320 1511 +/-200 deg AFT SEG 45 1535 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 90 1701.86 +/-200 deg AFT SEG 150 +/-200 deg AFT SEG 90	B06T7016A	135	1091.48	+/-200 deg	FWO/CTR SEG	GAGE LOST READS OPEN
270 1091.48 215 1091.48 90 1258.98 45 1411.48 135 1411.48 270 1411.48 215 1411.48 220 1511 274 1511 320 1511 45 1535 135 1535 90 1565 30 1701.86 150 1701.86	B06T7017A	325	1091.48	+/-200 deg	FWD/CTR SEG	
215 1091.48 90 1258.98 45 1411.48 325 1411.48 270 1411.48 220 1411.48 220 1511 274 1511 320 1511 45 1535 90 1565 30 1701.86	B06T7018A	270	1091.48	+/-200 deg	FWD/CTR SEG	
90 1258.98 45 1411.48 135 1411.48 325 1411.48 270 1411.48 220 1511 274 1511 320 1511 45 1535 90 1565 30 1701.86	B06T7019A	215	1091.48	+/-200 deg	FWD/CTR SEG	
45 1411.48 135 1411.48 270 1411.48 215 1411.48 220 1511 274 1511 320 1511 45 1535 135 1535 90 1565 30 1701.86 150 1701.86	B06T7020A	90	1258.98	+/-200 deg /	AFT/CTR SEG(TUNNEL)	
135 1411.48 +/-200 deg AFT/CTI 325 1411.48 +/-200 deg AFT/CTI 270 1411.48 +/-200 deg AFT/CTI 220 1511 +/-200 deg ET RI 274 1511 +/-200 deg ET RI 320 1511 +/-200 deg ET RI 45 1535 +/-200 deg AFT SEG 135 1535 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG 150 1701.86 +/-200 deg AFT SEG	B06T7021A	45	1411.48	+/-200 deg	AFT/CTR SEG	
325 1411.48 +/-200 deg AFT/CTI 270 1411.48 +/-200 deg AFT/CTI 215 1411.48 +/-200 deg AFT/CTI 220 1511 +/-200 deg ET RI 274 1511 +/-200 deg ET RI 320 1511 +/-200 deg ET RI 45 1535 +/-200 deg AFT SEG 1535 +/-200 deg AFT SEG 1565 +/-200 deg AFT SEG 1565 +/-200 deg AFT SEG 1565 +/-200 deg AFT SEG 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1561 1701.86 +/-200 deg AFT SEG 1561 1701 1701.86 +/-200 deg AFT SEG 1561 1701 1701.86 +/-200 deg AFT SEG 1561 1701 1701 1701 1701 1701 1701 1701 17	B06T7022A	135	1411.48	+/-200 deg	AFT/CTR SEG	
270 1411.48 +/-200 deg AFT/CTI 215 1411.48 +/-200 deg AFT/CTI 220 1511 +/-200 deg ET RI 320 1511 +/-200 deg ET RI 45 1535 +/-200 deg AFT SEG 135 1535 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG	B06T7023A	325	1411.48	+/-200 deg	AFT/CTR SEG	
215 1411.48 +/-200 deg AFT/CTI 220 1511 +/-200 deg ET RI 274 1511 +/-200 deg ET RI 320 1511 +/-200 deg ET RI 45 1535 +/-200 deg AFT SEG 135 1535 +/-200 deg AFT SEG 90 1565 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT SEG	B06T7024A	270	1411.48	+/-200 deg	AFT/CTR SEG	
220 1511 +/-200 deg ET R. 274 1511 +/-200 deg ET R. 320 1511 +/-200 deg ET R. 1535 +/-200 deg ET R. 1535 +/-200 deg AFT S 1535 +/-200 deg AFT S 90 1565 +/-200 deg AFT S 6 1701.86 +/-200 deg AFT S 6 1501.86 +/-2	B06T7025A	215	1411.48	+/-200 deg	AFT/CTR SEG	
274 1511 +/-200 deg ET R. 320 1511 +/-200 deg ET R. 45 1535 +/-200 deg AFT ST 135 1535 +/-200 deg AFT ST 90 1565 +/-200 deg AFT SEG 30 1701.86 +/-200 deg AFT ST 150 1701.86 +/-200 deg AFT ST	B06T7026A	220	1511	+/-200 deg	ET RING	
320 1511 +/-200 deg ET R 45 1535 +/-200 deg AFT 9 135 1535 +/-200 deg AFT 9 90 1565 +/-200 deg AFT 8E6 (30 1701.86 +/-200 deg AFT 8E 1 150 1701.86 +/-200 deg AFT 8E	B06T7027A	274	1511	+/-200 deg	ET RING	
45 1535 +/-200 deg AFT 5 135 1535 +/-200 deg AFT 5 90 1565 +/-200 deg AFT SEG 5 30 1701.86 +/-200 deg AFT 5 150 1701.86 +/-200 deg AFT 5	806T7028A	320	1511	+/-200 deg	ET RING	
135 1535 +/-200 deg AFT S 90 1565 +/-200 deg AFT SEG (30 1701.86 +/-200 deg AFT SEG (150 1701.86 +/-200 deg AFT SEG (B06T7029A	45	1535	+/-200 deg	AFT SEG	
90 1565 +/-200 deg AFT SEG 1701.86 +/-200 deg AFT SEG 1701.86 +/-200 deg AFT SEG 150 1701.86 +/-200 deg AFT SEG 180 1701.86 +/200 deg AFT SEG 180 1701.86 +/	B06T7030A	135	1535	+/-200 deg	AFT SEG	
30 1701.86 +/-200 de ₃ AFT 150 1701.86 +/-200 deg AFT	B06T7031A	06	1565	+/-200 deg	SEG (
150 1701.86 +/-200 deg AFT	B06T7032A	30	1701.86	+/-200 deg		
	B0617033A	150	1701.86	+/-200 deg		

B06T7034A	270	1701.86	+/-200 deg	AFT SEG	
B0617035A	45	1751.5	+/-200 deg		
B0617036A	135	1751.5	+/-200 deg	AFT SEG	
806T7037A	325	1751.5	+/-200 deg	AFT SEG	
306T7038A	270	1751.5	+/-200 deg	AFT SEG	
306T7039A	215	1751.5	+/-200 deg	AFT SEG	
B06T7040A	30	1821.00	+/-200 deg		
806T7041A	150	1821.00	+/-200 deg	AFT SEG	
B06T7042A	270	1821.00	+/-200 deg	AFT SEG	
B06T7043A	0	1847	+/-200 deg	FLEX BEARING	
B06T7044A	0	1845	+/-200 deg	NOZ THROAT	
B06T7045A	120	1847	+/-200 deg	FLEX BEARING	
B0617046A	120	1845	+/-200 deg	NOZ THROAT	
B06T7047A	240	1847	+/-200 deg	FLEX BEARING	
B06T7048A	240	1845	+/-200 deg	NOZ THROAT	
B06T7049A	0	1876.6	+/-200 deg	NOZ/CASE JNT	
B0617050A	120	1876.6	+/-200 deg	NOZ/CASE JNT	
306T7051A	240	1876.6	+/-200 deg	NOZ/CASE JNT	
306T7052A	0	1950	+/-200 deg	EXIT CONE	
306T7053A	120	1950	+/-200 deg	EXIT CONE	
806T7054A	240	1950	+/-200 deg	EXIT CONE	
806T7085A	184.5	480.0	+/-200 deg	IGNITER	
B06T7086A	355.5	480.0	+/-200 deg	IGNITER	
		RIGHT RSRM			
806T8003A	270	534.5	+/-200 deg	FWD SEG	
B06T8004A	135	694.5	+/-200 deg	FWD SEG	
B06T8005A	45	694.5	+/-200 deg	FWD SEG	
B06T8006A	215	694.5	+/-200 deg	FWD SEG	
B06T8007A	270	694.5	+/-200 deg	FWD SEG	
BOSTROORA			•		

FLIGHT 3 GROUND ENVIRONMENTAL INSTRUMENTATION (GEI)

B06T8009A B06T8010A					
3T8010A	90	778.98	+/-200 deg	FWD SEG (TUNNEL)	
	135	931.48	+/-200 deg	FWD/CTR SEG	
B06T8011A	45	931.48	+/-200 deg	FWD/CTR SEG	
B06T8012A	215	931.48	+/-200 deg	FWD/CTR SEG	
806T8013A	270	931.48	+/-200 deg	FWD/CTR SEG	
B06T8014A	325	931.48	+/-200 deg	FWD/CTR SEG	
806T8015A	135	1091.48	+/-200 deg	FWD/CTR SEG	
B06T8016A	45	1091.48	+/-200 deg	FWD/CTR SEG	
B06T8017A	215	1091.48	+/-200 deg	FWD/CTR SEG	
B06T8018A	270	1091.48	+/-200 deg	FWD/CTR SEG	GAGE LOST READS OPEN
B06T8019A	325	1091.48	+/-200 deg	FWD/CTR SEG	
B06T8020A	06	1258.98		AFT/CTR SEG(TUNNEL)	
B06T8021A	135	1411.48	+/-200 deg	AFT/CTR SEG	
B06T8022A	45	1411.48	+/-200 deg	AFT/CTR SEG	
806T8023A	215	1411.48	+/-200 deg	AFT/CTR SEG	
806T8024A	270	1411.48	+/-200 deg	AFT/CTR SEG	
306T8025A	325	1411.48	+/-200 deg	AFT/CTR SEG	
B06T8026A	320	1511	+/-200 deg	ET RING	
B06T8027A	266	1511	+/-200 deg	ET RING	
B06T8028A	220	1511	+/-200 deg	ET RING	
B06T8029A	135	1535	+/-200 deg	AFT SEG	
B06T8030A	45	1535	+/-200 deg	AFT SEG	
B06T8031A	90	1565	+/-200 deg	AFT SEG (TUNNEL)	
B06T8032A	150	1701.86	+/-200 deg	AFT SEG	
B06T8033A	30	1701.86	+/-200 deg	AFT SEG	
806T8034A	270	1701.86	+/-200 deg	AFT SEG	
306T8035A	135	1751.5	+/-200 deg	AFT SEG	
B06T8036A	45	1751.5	+/-200 deg	AFT SEG	
B06T8037A	215	1751.5	+/-200 deg	AFT SEG	
B06T8038A	270	1751.5	+/-200 deg	AFT SEG	
B06T8039A	325	1751.5	+/-200 deg	AFT SEG	
B06T8040A	150	1821	+/-200 deg	AFT SEG	
306T8041A	30	1821	+/-200 deg	AFT SEG	

INST. NO.	INST. NO. ANG. LOC.	STATION	RANGE		INSTRUMENTATION CONDITION
B06T8042A	270	1821	1821 +/-200 deg AFT SEG		
B06T8043A	180	1847	+/-200 deg	FLEX BEARING	
B06T8044A	180	1845	+/-200 deg	NOZ THROAT	
B06T8045A	9	1847	+/-200 deg	FLEX BEARING	
B06T8046A	9	1845	+/-200 deg	NOZ THROAT	
B06T8047A	300	1847	+/-200 deg	FLEX BEARING	
B06T8048A	300	1845	+/-200 deg	NOZ THROAT	
B06T8049A	180	1876.6	+/-200 deg	NOZ/CASE JNT	GAGE READS 8-11 DEG. LOW
B06T8050A	9	1876.6	+/-200 deg	NOZ/CASE JNT	
B06T8051A	300	1876.6	+/-200 deg	NOZ/CASE JNT	
B06T8052A	180	1950	+/-200 deg	EXIT CONE	
B06T8053A	9	1950	+/-200 deg	EXIT CONE	
B06T8054A	300	1950	+/-200 deg	EXIT CONE	
B06T8085A	4.5	480.0	+/-200 deg	IGNITER	
B06T8086A	175.5	480.0	+/-200 deg	IGNITER	

APPENDIX D

OFI Instrumentation List

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INSTRUMENTATION CONDITION										
COMMENTS			CHAMBER PRESSURE	CHAMBER PRESSURE	CHAMBER PRESSURE			CHAMBER PRESSURE	CHAMBER PRESSURE	CHAMBER PRESSURE
(SPS)	:: :::::::::::::::::::::::::::::::::::		ъ	1	12.5			2		12.5
ACC.			+/- 2%	+/- 2%	% 2 -/+			+/- 2%	+/- 2%	+/- 2%
RANGE	# # # # # # # # #		0-1000 psia	0-1000 psia	0-1000 psia			0-1000 psia	0-1000 psia	0-1000 psia
STA		LEFT RSRM	487.00	487.00	487.00		RIGHT RSRM	487.00	487.00	487.00
L0C.	1 1 1 1 1 1 1		40.00	180.00	270.00			40.00	180.00	270.00
INST.NO			B47P1300C	847P1301C	B47P1302C			B47P2300C	B47P2301C	B47P2302C
	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION	LOC. STA RANGE ACC. (SPS) COMMENTS	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION LEFT RSRM B47P1300C 40.00 487.00 0-1000 psia +/- 2% 5 CHAMBER PRESSURE	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION LEFT RSRM B47P1300C 40.00 487.00 0-1000 psia +/- 2% 5 CHAMBER PRESSURE CHAMBER PRESSURE	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION LEFT RSRM B47P1301C 40.00 487.00 0-1000 psia +/- 2% 1 CHAMBER PRESSURE B47P1302C 270.00 487.00 0-1000 psia +/- 2% 1 CHAMBER PRESSURE	INST.NO LOC. STA RANGE ACC. (SPS) COMMENTS INSTRUMENTATION CONDITION LEFT RSRM B47P1301C 40.00 487.00 0-1000 psia +/- 2% 5 CHAMBER PRESSURE B47P1302C 270.00 487.00 0-1000 psia +/- 2% 1 CHAMBER PRESSURE B47P1302C 270.00 487.00 0-1000 psia +/- 2% 12.5 CHAMBER PRESSURE	LEFT RSRM	LEFT RSRM	LEFT RSRM

DISTRIBUTION

Steve Morris	L10
Rex Riley	E16
Bryan Baugh	L36
Mike Williams	L36
Robin Jensen	L36
Neal Black	L36
Terrel Morgan	L10
John Wright	L36
Valerie Steineck	L36
Brian McQuivey	L10